

AN OREGON RESEARCH-PRACTICE PARTNERSHIP:  
A MULTIPLE CASE STUDY OF THE FIRST TWO YEARS  
OF IMPLEMENTATION ACROSS FOUR  
OREGON HIGH SCHOOLS

by

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## DISSERTATION ABSTRACT

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School systems across the country, like those in Oregon, continually attempt to improve their students' academic outcomes. Unfortunately, these costly efforts often fail to create lasting change. One factor in many of these failed improvement efforts is the lack of successfully implementing research-based practices (RBPs) at state and local levels. This phenomenon is often characterized as implementation failure. In the context of public K12 education, implementation failure often stems from a lack of knowledge about RBPs and a lack of capacity to implement them. While university-based school partnerships have long existed, these partnerships have more recently been formed to address this specific research to practice gap regarding the improvement of student outcomes.

The Oregon Research Practice Partnership (ORPP) was established in 2017, with the goal of improving high school graduation rates across Oregon by helping to close this gap and help schools successfully implement RBPs to improve student outcomes. The purpose of this study was to assess initial implementation of ORPP to understand its early-phase processes to determine its level of fidelity with original goals and to gain insight into how future efforts can strengthen similar partnerships and bolster their outcomes in companion schools. This study

includes a convergent mixed method design, examining school partner perceptions of the ORPP model. Results indicated that numerous implementation challenges existed early in the life of ORPP, which would require numerous adaptations for outputs to be more effective. Lessons are learned from these challenges that may help other similar partnerships in early phase implementation.

Lessons include the need for early identification and adoption of an integrated implementation framework to guide initial partnership development. Framework adoption should include identification of implementation drivers, a process to ensure proper model fit for schools and their needs, and a clear mechanism to successfully transfer knowledge for sustained adoption by school partners. Defined training guidelines and role definition for all partners, which vertically align with district vision and goals, should be in place. Lastly, model fidelity measures need to be in place from the start.

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## DEDICATION

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# CHAPTER I

## INTRODUCTION

Oregon students continue to face many problematic achievement and opportunity gaps, particularly among underserved urban and rural student populations (Richardson & Memmott, 2017). The state continues to have a comparatively troubling graduation rate as it is still currently near the bottom in national rankings with only New Jersey, Maryland, Ohio, Kentucky, Mississippi and Arkansas having a lower 4-year Adjusted Cohort Graduation Rate (ACGR) according to the most recent (2018-2019) data from the National Center for Education Statistics (National Center for Education Statistics, 2021). Over time the state of Oregon has attempted to implement numerous statewide efforts aimed at improving K-12 student outcomes and increasing graduation rates (Gezelter, 2018). Most recently, some of these efforts have started to lead to gradual improvement in statewide graduation rates (Gill, 2019). The most recent statewide ACGR for Oregon, from the 2018-2019 school year, was 81%, still well below the national average of 86% (National Center for Education Statistics, 2021).

Although there is a strong desire at the state level to increase high school graduation rates, finding and implementing local school-directed solutions that generate positive, sustained change remains challenging. According to a 2017 Oregon state government audit (Richardson & Memmott, 2017), schools urgently need direct and continued support with: (a) low-income students (particularly those who are highly mobile), (b) high schools with “mid-range graduation rates – 67%-85% - [who] receive limited improvement support from [the state], [as] most non-graduates attend these schools” (p. 1), (c) using school data to help students in danger of not graduating, and (d) effectively implementing improvement tools.

The Oregon Research Practice Partnership (ORPP) was announced in November, 2017 as a new research and outreach effort within the a university in Oregon to help schools address some of these needs. The purpose of this new effort was to create a partnership that would bring educational research and practice together to help improve the undoubtedly-low high school graduation rate across Oregon (National Center for Education Statistics, 2021). The ORPP was initially designed as a research practice partnership (RPP) to help partner schools improve their graduation rates, modeling its efforts on the tenets of the successful history of Agricultural Extension (Ag Extension), which has a lengthy and storied history of helping farmers improve their crop yields by bringing research to the field up through the end of the 20<sup>th</sup> century (Swanson, 2006; Richardson, 2005).

### **Problem Statement**

American public education, at its core, is intended to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access (US Department of Education, 2019). One challenge with this broad statement is that there are many unanswered questions about what this ideal of student achievement and preparation for global competitiveness should look like. Many can, and do, question the significance of different student achievement measures (e.g. standardized test scores) and argue the merits of different preparation and improvement approaches for how our students can best help America compete on a global scale (e.g. Career Technical Education courses, approaches for teaching math, etc.; Darling-Hammond, 2015; Zhao, 2009; Hargreaves & Fullan, 2015). Regardless of these arguments, it remains that most schools in our public K12 system need to implement significant reform efforts to improve student outcomes and ensure those students have equal access and opportunity to learn, grow and prepare for life after high school, regardless of



their postsecondary pathway (National Academies of Sciences, Engineering, and Medicine, 2019A; National Academies of Sciences, Engineering, and Medicine, 2019B).

Since the middle of the 20<sup>th</sup> century, there have been continuous attempts to improve student outcomes through national and state educational reform efforts in the United States (Hargreaves & Fullan, 2015; Fullan, 2007; Fullan, 2009). Public schools have been working to improve student outcomes for many years with very few results to show for it (Bryk, Gomez, Grunow & LeMahieu, 2015; Fullan, 2016). Some of those reform efforts have included: (a) improving teacher effectiveness through professional development (Darling-Hammond, Hyler, Gardner, 2017; Desimone, Porter, Garet, Yoon, & Birman, 2002; Hill, 2009), and implementing instructional coaches and leaders (Bryk et al., 2015), (b) improving high-stakes standardized testing outcomes (Bryk et al., 2015; Hargreaves & Fullan, 2015), and (c) improving teacher effectiveness through merit pay (Bryk et al., 2015; Hargreaves & Fullan, 2015).

While many of these reform examples have been implemented at national and state levels, many more improvement efforts still are made at the local district and individual school level where various decision-making processes for school improvement are still made (Penuel et al., 2017; Bryk, 2010). Many of these local efforts have included an increasing emphasis on using data-based decision making (Honig & Coburn, 2008), multi-tiered systems of support (MTSS; McIntosh, & Goodman, 2016), improving instructional effectiveness (Reynolds, 2007; Scheerens, 2016) and accessing, identifying and implementing evidence-based practices (EBPs; Blase, Fixsen, Sims, & Ward, 2015). School improvement efforts, such as these, are difficult to successfully implement over time, particularly at scale (Coburn, 2003). As Fullan (2007) succinctly stated, “Putting ideas into practice was a far more complex process than people realized” (p. 5). While educational leaders find themselves facing the need (and often times the

top-down requirement) to consistently and coherently incorporate aspects of these types of evidence-based improvement efforts (Boaz & Davies, 2019), the challenge of doing so becomes increasingly complex when one considers the myriad needs and time constraints teachers and educational leaders face on a daily basis (Coburn, Penuel & Geil, 2013). Educational leaders and classroom practitioners alone cannot be expected to use research and evidence-based practices on a useful scale because schools do not typically have the capacity (i.e. resources, knowledge, skills, and abilities) needed to implement and sustain these practices with fidelity (Ryan Jackson et al., 2018). There remains a need to foster a ‘deeper’ more substantive use of research evidence at the local district and school level by leaders and instructional staff (Coburn et al., 2009). It is not enough to mandate or incentivize educational leaders to skillfully incorporate research evidence into their improvement processes, as this commonly leads to surface-level symbolic (e.g. political) use (Penuel et al., 2017; Coburn et al., 2009).

A clear research to practice gap exists between day-to-day educational practice and the ability of practitioners to find, assess and implement existing research-based practices (RBPs) that could be employed to help improve the chronic challenges our schools face (Coburn & Stein, 2010). There are many known challenges that have led to the existing research practice gap in education. On one side, many educational researchers are unsatisfied that more of their work does not influence educational practice, and on the other side many educational leaders and practitioners would prefer if educational research was more relevant to their needs, timelier and more readily available (Tseng, 2017). Work remains to investigate the ways educational leaders can successfully create and work within a developing infrastructure to access and implement research to increase school improvement outcomes (Tseng, 2017).

High-performing public schools, ones that have implemented and sustained improvement efforts to a high degree, often share the common traits of expert leadership that helps facilitate the delivery of high-quality instruction from high quality teachers who are constantly evolving, learning, collaborating and improving themselves and their peers (Bryk, 2010; Fullan, 2016). But many questions remain in current school improvement literature on how more schools can become ‘high performing.’ At its most fundamental level, there is a clear need for schools to improve, but there are numerous roadblocks and challenges in making sure those improvement efforts succeed. Some schools are able to do it and create sustained improvements. Those schools very often have specific, common, traits that make them high-quality, and many of those traits are centered around expert leadership and high-quality classroom instruction. For underperforming schools to improve their student outcomes, they need to generate the improvement capacity that will allow for the growth of expert leadership across multiple in-school stakeholders and high-quality classroom instruction (Bryk, 2010; Bryk et al., 2015). Many questions remain as to how underperforming schools should approach efforts to increase improvement capacity, improve processes to successfully identify and address problems of practice and gaps in service, and improve classroom instruction through research knowledge transfer.

### **Study Significance**

School improvement work is difficult and slow (Bryk et al., 2015; Fullan, 2015; Bryk, 2010) and as previously stated many questions remain as to the best methods to approach those improvement efforts. Regardless of the area of reform, public schools have been working on change efforts to improve student outcomes for many years with very few results to show. Despite calls from researchers and significant federal investments a large gap between research

and practice persists. We still have a limited understanding of how educational leaders, in particular, engage research, including what makes research useful to them (Tseng, 2012). Many questions remain in the arena of school improvement. Some of those questions include: How can schools more successfully increase their improvement capacity? How can educational leaders better distribute responsibility to staff to help steer that capacity growth? How can research practice partnerships of various stripes assist in those efforts by helping schools skillfully implement RBPs in their school improvement efforts, thereby closing the acknowledged research to practice gap? This investigation will work to help shed some light on the answers to these questions. In particular, there is little, if any, scholarship on the theoretical framework of an education-focused research practice partnership using the traditional tenets of agricultural extension as its own goals in partnership and collaborative efforts and outputs. This novel approach offers new potential insight into how this type of collaboration can address some of these lingering gaps in knowledge.

## CHAPTER II

### LITERATURE REVIEW

#### **School Improvement**

School leaders and policy makers have been attempting to improve school outcomes for well over fifty years (Fullan, 2016; Murphy, 2013; Darling-Hammond, 2010; Hopkins, 2001). A primary driver of this push to improve K-12 student outcomes in our schools comes from the perceived need to compete in the global economy (Wilgus, 2019; US Department of Education, 2019). According to the Bureau of Labor Statistics (“Employment status of the civilian population”, 2019), those who do not graduate from high school have significantly higher unemployment rates compared to their graduating peers, and they are less likely to have full-time employment. Increasing the number of students who graduate from high school in the United States, armed with the skills and knowledge to compete in a highly technical global economy (e.g. increased human capital), largely means that the country will be able to retain a leadership position in fueling (and gaining from) that economy (Wilgus, 2019).

While these iterative school improvement efforts have cycled through many different and common labels, such as; student-centered learning, effective schools, school restructuring, and school turnaround, all of these efforts take place within the context of that specific time and the economic, social and political forces that exist within it (Murphy, 2013; Wilgus, 2019). Most recently, these political forces, often coming from top political leaders at the federal level, have directed state and local school leaders down a path of increased accountability for student outcomes (e.g. graduation rates, standardized test scores, etc.).

These early notions of a national push for student accountability (one could argue stemming from the 1983 *Nation at Risk*, published under the Reagan Administration) really first

coalesced with George H. W. Bush's *America 2000* (Wilgus, 2019). Hopkins (2001) argues that this is a shift from the, "somewhat paternalistic approach to education to a situation where schools are not only encouraged, but are increasingly required, to take responsibility for their own development" (p. 1). *America 2000* was one of the first federal policies to ask for a set of national standards (which would circuitously lead to the *Common Core State Standards*), an increased emphasis on math and science, and a goal of a national graduation rate of 90% (Wilgus, 2019). Since then, American education has seen the coming and going of the federal No Child Left Behind (NCLB) Act, which continued this trend of holding local schools accountable for student outcomes, and ratcheted up the requirements started under *America 2000*. NCLB policy included school requirements for Adequate Yearly Progress (AYP) with penalties for schools who did not meet it, the mandated testing of students using the National Assessment of Educational Progress (NAEP), and the publication of district and school 'report cards.' All of these outcomes were required to be disaggregated by new categories including; racial and ethnic classifications, students eligible for Free and Reduced Lunch (FRL), students identified as having limited English proficiency, and students who qualified for special education services (Wilgus, 2019).

Since NCLB, there have been a host of federal policies implemented across the country in varying degrees, including: Common Core State Standards (CCSS), CCSS aligned standardized assessments (the Smarter Balanced Assessment Consortium or 'SBAC' and the Partnership for Assessment of Readiness for College and Careers, aka 'PARCC'), the Obama era 2009 Race to the Top, and most recently the 2015 Every Student Succeeds Act (ESSA) (Wilgus, 2019). While going into greater detail is beyond the scope of this work, all of these recent policy efforts have centered on school's being increasingly accountable for improving student outcomes

in some form or another. In response to colleges and workplace complaints of students and new hires lacking basic literacy and math skills, CCSS were implemented across the country in an effort to collectively increase those skills lacking in high school graduates (Fullan, 2016; Wilgus, 2019). The nationally available standardized SBAC and PARCC assessments were designed and implemented to assess the increased knowledge and skills based on the CCSS. The Race to the Top policy was meant to remove the punitive aspects of NCLB, while offering competitive grant funding for school systems to improve teacher quality, student performance and college readiness. It also offered grant funding for the development of Charter Schools (Hourigan, 2011). Wilgus (2019), like many others, argues that to date, all of these federal improvement policies have had mixed and varied results, with none of them having a clear across the board, long-lasting positive impact on improving student outcomes. The most recent large-scale national policy, the 2015 Every Student Succeeds Act (ESSA), was only just implemented in the 2017-18 school year, so it is too early to tell what its lasting impact will be. While ESSA still focuses on increasing graduation rates, improving test scores, and English-language proficiency, it is seen as a departure from NCLB. It is generally acknowledged as giving back much more control to districts and schools as they determine their own goals in those areas, and how they will meet them. These plans must also include specific strategies on how they will close achievement gaps with identified sub-groups who lag behind (Wilgus, 2019).

These various national policy requirements have clearly and continually moved in the direction of holding districts and schools accountable for improving student performance outcomes. While more recent policies such as ESSA have given some control back to local entities, one large question remains. What are the best evidence-based approaches for them (i.e.

local school entities) to create and sustain successful systems and structures that will lead to *improved* student outcomes?

### ***Improvement Science***

Before discussing how schools can improve student outcomes, it was beneficial to understand what it means to purposefully improve any given system whether it is a school system, a health care system, or a computer network system. Improvement science provides us the tools to gain knowledge of how to improve any given system through purposeful study and practice (Langley, Moen, R. Nolan, K. Nolan, Norman & Provost, 2009). In the *Improvement Guide* (2009) Langley et al. base their *Model for Improvement* on three fundamental questions:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What change can we make that will result in improvement?

Langley et al. (2009) suggest using a Plan, Do, Study, Act (PDSA) cycle when organizing improvement structures and systems in order to answer the three driving questions of their *Model for Improvement*. Fundamental to the work of improvement in schools, as with any system that wishes to improve any of their outcomes, is the idea that change must occur for improvement to happen. As Langley et al. (2009) stated:

We recognized some time ago the fundamental relationship between improvement and change. By this we mean specific, identifiable changes, not broad or vague organizational or cultural change. The rate and extent of improvement is directly related to the nature of the changes that are developed and implemented. It is through this focus on developing substantive change that the *art* of improvement is combined with the *science* of improvement. (p. 5-6)

However, as stated earlier, school improvement is challenging, and improvement efforts often lead to failure. Regardless of the quality of the intervention and the research that supports it, many research-based interventions continue to fail in their efforts to improve long term school



outcomes. As discussed previously, there is a gap between educational research and its implementation into practice. As Langley et al. (2009) suggest, the organization itself must be ready to change if it wishes to improve. In other words, schools cannot simply ‘apply’ a research-based intervention and expect improved outcomes. Instead, the initial goal of school improvement needs to be centered around increasing the improvement capacity of the school itself (Bryk et al., 2015).

Like the Plan, Do, Study, Act cycle of Langley et al. (2009), much of the school improvement literature relies on rapid cycles of continuous improvement (Lewis, 2015). Bryk et al., (2015) specify a set of improvement categories that go beyond simple implementation of research-based interventions to include: (a) the importance of identifying specific personnel-related problems of practice within the school (e.g. problems within the control of school officials), (b) the importance of examining existing school systems and structures to identify service problems to be addressed prior to introducing new improvement efforts (e.g. improving overall teacher PD delivery structures and techniques prior to implementing a new intervention requiring additional PD), and (c) disciplined inquiry where they advise a patient and thorough investigation of the planning and implementation process when introducing new improvement efforts into schools. Bryk et al., (2015) also emphasize the incorporation of Networked Improvement Communities (NICs, a form of Research-Practice Partnership) to help organize collaboration and networked support around these improvement efforts.

### ***School Improvement Capacity***

As Bryk et al., (2015) mention, for local school entities to understand how they can best approach efforts to improve students’ outcomes (e.g. test scores, grades and graduation rates) they need to understand what it is they have to change and improve. John Hattie (2008), in his

synthesis of over 800 meta-analyses on the subject (which the author claims is one of the largest studies of its kind and focus ever) list six separate contributors to overall student achievement: (1) the child, (2) the home, (3) the school, (4) the curricula, (5) the teacher, and (6) the different approaches to teaching (p. 31). While on the surface, it may seem like a school's ability to impact the child and the home setting may be limited compared to the other four contributors, Hattie (2008) argues that many factors such as the child's views and predictions of their own performance can definitely be partially shaped by their teachers and the overall schools experience. The same can be said for the home, though the impact a school can have on the home environment may be more limited. In one specific example, Hattie (2008) discusses the importance of parental knowledge of the language and culture of school and schooling, particularly when it comes to the schools, "role in helping parents to learn the language of schooling so that the parents can provide every possible assistance to their children in terms of developing the child's learning and love of learning, and in creating the highest possible shared expectations for learning (p. 33). For a local school and / or school district to positively impact any or all of these six different contributors to student achievement they must have the capacity (resources, knowledge, skills, and abilities) to improve their own school systems, structures, and cultures.

Some school improvement literature indicates that there are common traits schools can integrate into their existing service systems to become more coherent and aligned to help facilitate improvement capacity. In one example of how schools can organize to prepare for school improvement efforts, Bryk (2010) discusses: (a) a coherent and coordinated instructional guidance system for teachers, (b) the school's professional capacity (i.e. the continually developing quality of the teachers), (c) strong parent-community-school ties, (d) A student-

centered learning climate, and (e) leadership that drives change (p. 24-25). Fullan (2016) posits a similar list of improvement capacity building factors: (a) deep change in the culture of learning, (b) local ownership of the learning agenda, (c) a system of continuous improvement and innovation that is simultaneously bottom-up, top-down and sideways (p. 543). Both emphasize the importance of leadership and continuous professional growth and you can see how each authors list, in their own ways, touch on Hattie's (2008) original six contributors to student achievement.

The onus of responsibility in ensuring that all of these traits exist schoolwide cannot lie within a teacher or principal by themselves. Schools do not typically have the capacity (resources, knowledge, skills, and abilities) needed to use and sustain district mandates regarding the implementation of evidence-based programs (Ryan Jackson et al., 2018). School administration and classroom practitioners can benefit greatly from a well implemented support team functioning at the school, district, and regional levels to support continuous improvement efforts of teacher instructional practices (Ryan Jackson, Fixsen & Ward, 2018). When improvement efforts within the school hit a barrier or a road block in their efforts to implement improvement efforts, the networked team (with the resources and authority to do so) should be there to help remove the barrier, address the challenge, and rapidly deliver viable solutions. This process can create buy-in and an increased commitment from school and district staff to help sustain these evidence-based practices over time for continuous improvement of teacher instructional practices, leading to improved student outcomes. The infrastructure of networked implementation teams who take responsibility for these types of implementation efforts can contribute to the co-creation of a coherent and aligned system, supporting increased improvement capacity, high-quality instructional practice and continuous improvement (Taylor

et al., 2014). A network that helps lead the implementation of improvement efforts and uses practitioner input and information to inform the development of school policy (e.g. improvement in school culture, systems and structures) that in turn can enhance and sustain effective practices is what can help schools increase improvement capacity in order to scale-up a RBPs so that they can be implemented with fidelity and sustained over time (Ryan Jackson & Ward, 2019; Ogden et al., 2012).

### ***Distribution of School Leadership***

Leithwood, Harris and Hopkins (2006) stated that, “School leadership is second only to classroom teaching as an influence on pupil learning” (p. 27). The authors (2006) discuss the idea that a teacher’s instructional effectiveness, or how well they lead the learning process in the classroom, is one of the most important school factors for increasing student outcomes. But, not all teachers start out being high quality instructors in the classroom. Many require additional on-the-job training to develop their craft, and high-quality schools need to have the capacity to help improve their teacher’s instructional effectiveness to become high quality teachers (Bryk, 2010; Fullan, 2016). High quality schools that are able to improve a teacher’s instructional effectiveness should not see school improvement as a project with a beginning and end time, but rather allow improvement leaders (e.g. principals and other administrators) the time and ability to “facilitate deep engagement in [improvement] activities (Bryk, Gomez, Grunow & LeMahieu, 2015, p. 189).

Many studies show that highly effective and impactful teacher Professional Development (PD) is one of the most successful ways to improve the instructional effectiveness of teachers, once hired into their schools (Desimone et al., 2002). It is hypothesized here that teachers who perceive a higher value of the PD itself, and a stronger perception of how they see their leaders

valuing that same PD, will help predict how much that teacher works to incorporate PD content into their instructional practices. So, the more a teacher sees value in the PD and the more they perceive their school leaders valuing the PD, the more they will incorporate it into their instructional practices, ideally leading to improved student outcomes. It is important for school leaders to be seen as instructional leaders who are experts in instructional delivery, and are leading overall PD efforts. This is not to say they need to be an expert in the specific PD being delivered, but rather that they have had a strong hand in the overall delivery and implementation planning of the PD itself. They should be clearly seen as improvement leaders throughout their school buildings, caring about and driving forward improved teaching (Bryk, Gomez, Grunow & LeMahieu, 2015).

While it is very difficult for school leaders and instructional staff to implement sustained school improvement change by themselves, the importance of educational leadership in both facilitating the development of improvement capacity and in successfully driving and sustaining those improvement efforts is clear (Leithwood, Day, Sammons, Harris & Hopkins, 2006; Hallinger & Heck, 2010). However, distributed leadership is not about one person heroically leading the improvement charge (Hallinger & Heck, 2010; Spillane, 2005). Rather it is about distributing those leadership responsibilities by harnessing the shared experience and expertise of those practitioners, and other partners, who are the closest to the ground and who have direct knowledge of the issues at hand (Spillane, 2006) to co-create the improvement capacity infrastructure through the leadership *actions* that will be accessible and sustainable within the unique school setting (Fixsen et al., 2013; Spillane, 2005). These leadership actions, which take place between those with school leadership roles and those with follower roles, contribute to a

school's cultures, systems and structures which form the basis for a school's capacity to improve (Spillane, 2005; Spillane, 2006).

### ***Improving Use of Research Evidence in Improvement Efforts***

There remains a need to foster a 'deeper' more substantive use of RBPs at the district and school level by leaders and instructional staff (Coburn et al., 2009). It is not enough to mandate or incentivize educational leaders to skillfully incorporate research evidence into their improvement processes, as this commonly leads to surface-level symbolic (e.g. political) use (Penuel et al., 2017; Coburn et al., 2009). There is a need for higher quality educational research to be used more frequently in a school's efforts to improve their outcomes (Penuel et al., 2017, Bryk et al., 2015). What is of particular interest is how educational leaders can improve their instrumental and conceptual use of research. Tseng (2012) and Coburn (2009) interpret 'instrumental use' of research to mean the direct application of research knowledge for a specific problem or decision at hand and 'conceptual use' to mean the use of research that is ideationally used by educational leaders, practitioners and other decision makers to help influence their thinking on problems and potential solutions. The ORPP project works to improve the use of evidence-based and research-based practices among its school partners, including the original four school partners within its original network starting in the fall of 2017.

For the sake of simplicity and clarity, moving forward with this research project, use of the term *research-based practices* (RBPs) includes practices (e.g. curriculum, strategies, etc.) that were included in knowledge transfer efforts by ORPP working to move them into action within partner schools. These RBPs included practices within a wide spectrum from lower threshold practices that include some research demonstrating potentially positive effects on students to evidence-based practices which have a stronger, more consistent, and larger body of

evidence that shows a clear inference from implementation of the practice to student improvement (Cook, Smith & Tankersley, 2012).

### **High School Graduation Rates**

As stated previously, the United States needs more skilled high school graduates (whether college or career training bound) to successfully compete in the global economy (Wilgus, 2019; US Department of Education, 2019). Those who do not graduate are much more likely to be unemployed or underemployed, and not able to contribute to the globally competitive workforce as needed (“Employment status”, 2019). But, a high school diploma is more important than just the greater good of ensuring our countries place towards the top of the global economy:

... a high school diploma has become a prerequisite to postsecondary education and obtaining a livable wage and is associated with a wide range of important health and civic outcomes. Although strong and consistent progress has been made over the past decade in raising graduation rates, too often the same students, particularly those who are Black, Hispanic, low-income, and with disabilities, still have the most disparate outcomes, resources, and opportunities (DePaoli, Balfanz, Bridgeland, Atwell & Ingram, 2016 p. 7).

So, is our nation’s high school graduation rate improving? What factors lead to improvements in high school graduation rates? The simple answer to the first question is yes, national high school graduation rates have improved. However, this increase has only been very recent, with forty years of prior stagnation, and still today approximately 15% of high school students fail to graduate. When you look at specific subgroups of students, particularly racial / ethnic minority groups, dropout rates are even higher, and more problematic. In 2015, Allensworth observed that, “nationally, graduation rates for Black and Hispanic students were 64 and 67%, respectively, in 2010 compared to 81% for white students” (p. 354). This, despite the clear social and economic benefits of graduating from high school, even including a *longer life span* (Allensworth, 2015). In the 2019-2020 Oregon Department of Education Report Card

(2020), the state of Oregon stated that it is successfully working to close the graduation gap in underserved populations of students. The ODE Report Card states that this gap between underserved races and ethnicities (Black/African American, Hispanic, American Indian/Alaska Native, and Native Hawaiian/Pacific Islander) and other students (White, Asian, Multiracial) shrank by 3.9% over the last five years (Gill, 2020).

According to DePaoli et al. (2016) since 2001 (the first year the authors believe a good national estimate was available) graduation rates have improved by over 13% as of 2016. Since 2011, when states started using the commonly calculated Adjusted Cohort Graduation Rate (ACGR), it increased over 5% to 84.1% as of 2016 (DePaoli et al., 2016). According to the National Center for Education Statistics (NCES), and the most recently available school year, the national 2018-2019 ACGR was 86% (National Center for Education Statistics, 2021). So, the slow upward trend seen in Oregon, appears to be following the national trend.

The second question about factors that lead to improved high school graduation rates is more difficult to answer. There remains a lot to be learned about what works when it comes to keeping students engaged in school through to high school graduation, and how. More is known about drop out risk factors that may lead a student down a path of potentially dropping out prior to graduation than factors that keep them in school. Risk factors are often categorized into two groups: status risk factors and alterable risk factors. Status risk factors are those that are commonly thought of as difficult or unrealistic for a school to address (i.e. parental education and employment, gender, socio-economic status, and native language), while alterable risk factors are those that schools can work to address (i.e. academic failure, poor attendance, and misconduct) and have more control over (Freeman & Simonsen, 2015). According to Freeman and Simonsen (2015), much less is known about how to fix or improve the factors that often lead



to dropping out of high school. These same authors go on to discuss a lack of evidence-based programs listed by the What Works Clearinghouse (WWC) that help keep students in school through to graduation. Of the 19 that Freeman and Simonsen (2015) identified on the WWC, only seven were school-based. Of those seven, four have some evidence that their program helps students stay in school, but these did not focus on actual graduation. Of the five WWC identified programs for helping small groups and / or individual students stay in school, four of them were recovery programs focused on helping students recovering credits and earning their General Education Diplomas (GED), not their full high school diplomas (Freeman & Simonsen, 2015).

Related to the lack of strong evidence-based dropout prevention programs listed by the WWC that Freeman and Simonsen discussed, in 2008 the Institute for Education Sciences (IES) released a 'Practice Guide' that mentions six different recommendations for local school entities to potentially implement to help students avoid dropping out (Dynarski et al., 2008). The IES evidence ratings included in this practice guide ranged from low to strong. The six different recommendations had levels of evidence strength rated from low to moderate, none of them earning a strong level of evidence. They included; (1) Utilizing a data system diagnostic tool to help identify and support students at risk of dropping out (low evidence), (2) Assigning adult advocates to students at risk of dropping out (moderate), (3) Providing academic supports and enrichments to improve academic performance for at-risk students (moderate), (4) Implementing student programs to help improve their classroom behavior and social skills (low), (5) Personalizing the learning environment and instructional process to create a sense of student belonging and create a positive school climate (moderate), and (6) Provide rigorous and relevant instruction to better engage students in learning and provide the skills needed to graduate and to serve them after they leave school (Moderate; Dynarski et al., 2008, p. 6).

In a related synthesis of existing studies on the promotion of continued enrollment through to high school graduation, Zaff, Donland, Gunning, Anderson, McDermott and Sedaca (2017) found similar evidence-based characteristics or factors that can help keep students in school through to graduation. These four factors included; (1) individual student strengths (i.e. academic motivation, engagement and locus of control), (2) connection to and guidance from parents (i.e. schools keeping parents connected to schools and their students' academic progress), (3) Close and positive connections with teachers and peers (i.e. positively supporting students through challenging times in academic progressions and the peer-to-peer norms set around academic attainment), and (4) Providing opportunity for extra-curricular opportunities for engagement (i.e. activities that offer skill-building like robotics teams, or speech and debate clubs, as well as those that create a sense of belonging and learning of social norms).

### ***The Chicago Consortium's Findings on Keeping Students On-Track to Graduate***

The University of Chicago's Consortium on School Research (i.e. the Chicago Consortium) is well known for its successful work in improving graduation rates in Chicago public schools, particularly with recognizing the importance for students to stay 'on track' (avoiding failing grades in courses) early in their academic careers (Roderick, Kelley-Kemple, Johnson & Beechum, 2014; Roderick, Easton, Sebring, 2009; Allensworth & Easton, 2007; Allensworth & Easton, 2005). Taking a broad look at many of the Chicago Consortiums published works, examining their results for the factors that keep students engaged in school through to graduation, they have collectively found evidence for the following: (1) Early identification of students at-risk of dropping out through the use of student-level data systems (Allensworth, Healey, Gwynne & Crespino, 2016; Allensworth, 2015; Allensworth & Easton, 2005), (2) Keeping students engaged and attending school regularly, particularly through

difficult school transition years (Allensworth, 2015; Allensworth & Easton 2007), and (3) Having close supportive relationships with teachers and other adults in the school, helping to keep students ‘on-track’ for graduation by passing all of their courses (Allensworth et al., 2016; Allensworth, 2015; Allensworth & Easton 2007; Allensworth et al., 2014). While the number of credits varies somewhat in Oregon by comparison, The Chicago Consortium defines On-Track to mean earning, “at least five full-year course credits (ten semester credits) and no more than one semester F in a core course (English, math, science, or social science) in their first year of high school (Roderick et al., 2014, p. 4). Allensworth (2015) argues that while there are many numerous additional factors, in and out of school, that determine if and how students can continue to successfully persist through high school until they graduate, “school personnel just need to know when these factors are interfering with students’ course performance—and that is something they can easily monitor (p. 356-357). The author goes on to state that, “This takes the problem from one that is outside of the realm of schools to one that is fully tied to their core mission (2015, p. 357).

The recognition of these factors are what have led to numerous different school improvement and reform efforts that range from creating strong advisory period teacher-student relationships, and other small learning community systems within schools, to creating contained specialized 9<sup>th</sup> grade success ‘systems’ (e.g. small schools within schools, student-based PLCs etc.) that work to ensure freshman are on track to graduate by the time their 9<sup>th</sup> grade year of high school is complete (Allensworth, 2015). The in-building efforts to keep students on-track can differ depending on all of the different school variations, but they share the same core idea of creating positive and close teacher-student relationships to help students remain engaged and successful through to graduation. These efforts related to early identification, improving

engagement and attendance, and helping keep students on-track have concretely shown to increase overall graduation, with noted improvements in closing the gap with underserved student populations (Roderick et al., 2014; Allensworth, 2015).

### **Research-Practice Partnerships**

Research-Practice Partnerships (RPPs) represent one approach for growing and sustaining school improvement capacity through the collaborative implementation of RBPs into schools (Coburn & Penuel, 2016). While RPPs are not new, we continue to learn how they can best function to close this research to practice gap and help collectively and collaboratively improve school outcomes (Coburn, Penuel & Geil, 2013; Coburn & Penuel, 2016).

Unfortunately, one-way top-down ‘stick and carrot’ approaches are still common when implementing school improvement efforts, with educational leaders and administrators being encouraged, or even required, to incorporate research knowledge with little to no reciprocal voice or researcher to practitioner collaboration (Hargreaves, Lieberman, Fullan & Hopkins, 2010).

RPPs are often situated to help alleviate the common logjam between educational researchers and educational practitioners. This logjam, or stalemate, often occurs because researchers feel frustration at the practitioners’ lack of use, or misuse, of evidence-based research, and practitioners feel that the evidence-based research is not timely enough, irrelevant or too complex to implement (Tseng, Easton & Supplee, 2017). RPPs are meant to help remove the common one-way top-down relationship between educational researcher (at the top) and the educational practitioner (on the bottom) as the receiver of the educational research. Instead RPPs are designed to create a two-way equitable partnership, where the team of researchers and practitioners work to identify problems of practice, and help create evidence-based approaches

and strategies to address them, creating a system where research informs practice and practice informs research (Penuel & Gallagher, 2017; Tseng, Easton & Supplee, 2017). Coburn, Penuel and Geil (2013) define an RPP as, “Long-term, mutualistic collaborations between practitioners and researchers that are intentionally organized to investigate problems of practice and solutions for improving district outcomes” (p. 2). They go on to identify five separate and distinct ways school entities (e.g. school districts in their particular experience) and researchers in RPPs should work together: (1) the relationships should be long term, (2) they should focus on problems of practice, (3) they should be committed to mutualism (i.e. working together equally in collaboration), (4) use intentional strategies to foster partnership, and (5) produce original analysis (Coburn, Penuel & Geil, 2013, p. 2). There are numerous national RPPs of note, that have different networks and partnerships across the country working with different school entities on developing solutions to different problems of practice. These partnerships are working to increase the evidential basis for which RPPs can successfully function, develop and expand.

### ***SERP***

The Strategic Education Research Partnership (SERP) is an independent nonprofit organization that was developed through the National Academy of Sciences. SERP states that their purpose is to, “generate innovative, scalable solutions to our schools’ most pressing problems through sustained collaborations among researchers, practitioners, and designers. We work to increase equity, improve student learning, and give teachers and students greater agency” (“SERP Institute”). According to SERP’s own website, their collaboration model with school entities follows a basic process of: (1) working with school districts on a problem of practice (PoP) they have identified independently, (2) recruiting expert researchers with relevant experience and knowledge on the given PoP, (3) creating scalable products using practice-

informed design, and (4) managing the partnership process in an effort to minimize attention to status, maximize stakeholder contributions, and stimulate productivity and progress (“SERP Institute”). Some of SERP’s scalable products are freely available on their website, others have been launched as pay-for-use products. The specific areas that SERP has worked with partners include; adolescent literacy, mathematics (with a particular focus on algebra), science and science literacy, English language learning, and organizational capacity and school culture (“SERP Institute”).

One particular project, the AlgebraByExample product, which incorporated SERP’s Minority Student Achievement Network (MSAN; a SERP RPP), used an experimental design (random assignment) to study the implementation of the AlgebraByExample program on minority students taking Algebra I. The MSAN RPP approached SERP about the specific problem of students within their network struggling to pass Algebra I (a common issue across the country). By the end of the year-long study treatment students who completed the AlgebraByExample assignments and curriculum had a statistically significant increase in posttest scores (Booth et al., 2015). One highlight of this positive result included “treatment students in the lower half of the performance distribution [who] outscored comparable control students by approximately 10 percentage points (Booth et al., 2015, p. 95).

One example of the pay-for-use products that SERP has produced is the ReadReady<sup>®</sup> diagnostic reading assessment for grades 3 – 12. This product is available through the ETS<sup>®</sup> assessment company and Capti<sup>®</sup>, another online platform and assessment company (“SERP Institute”) and includes a lengthy list of peer-reviewed publications with it.

One relevant SERP project currently being implementing is the i2 Innovation and Induction clusters project (i2 Clusters). Based on available information, i2 Clusters is an RPP

effort that recruits whole school districts to become partners. These districts go through an involved process to identify and recruit schools in underserved areas to voluntarily join the RPP. Schools who opt in, then go through a process of identifying ‘master teachers’ who will help mentor less experienced teachers to develop their instructional skills. These teams of teachers collaborate with SERP researchers on site-specific RBPs that meet the needs of teachers and students (“SERP Institute”). According to Donovan (2017) the i2 Clusters RPP project leans on the model of training medical doctors in teaching hospitals. This induction process for medical doctors, the author argues, is nearly identical across the country, and asks why it is not the same for teachers. The i2 Clusters project, Donovan (2017) argues is aimed at addressing the lack of agreed upon knowledge accrual and classroom training (aka teacher induction) by exploring and expanding what is known about effective teaching, and helping to prepare new teachers according to that knowledge, leveraging the practitioner experience of partner master teachers.

### ***Carnegie Foundation for the Advancement of Teaching***

The Carnegie Foundation for the Advancement of Teaching (Carnegie Foundation) was founded in 1905 and chartered in 1906 by the US Congress. It was established with funding from American industrialist and famed philanthropist Andrew Carnegie. Initially its mission was “to encourage, uphold, and dignify the profession of the teacher and the cause of higher education” (“Carnegie Foundation”). Today, the Carnegie Foundations goals are slightly more specified. They aim to “build a field around improvement science and networked improvement communities that solves important problems of educational practice” (“Carnegie Foundation”). Some of their larger scale projects include partners such as; Baltimore City Public Schools, the Evidence for Improvement Network (EFI), the Raising Texas Teachers Initiative, and the Improvement Leadership Education and Development (iLEAD) network.

One particular Carnegie Foundation project that has been thoroughly publicized is the Math Pathways program. Math Pathways is a set of two math bridge courses for college students who are challenged by regular entry-level college level math courses. The Quantway and Statway courses were developed and supported through a Carnegie Foundation led Networked Improvement Community (NIC) in partnership with college faculty (mostly or all community college faculty, the literature is not 100% clear), college administrators, researchers and program designers (Hoang, Huang, Sulcer & Yesilyurt, 2017). The program is not just a set of math curriculum for faculty to teach, it includes pedagogical techniques and student activities designed to increase engagement. Carnegie managed the Math Pathways NIC to be led by the field and for the field. The NIC purposefully engaged outside educational researchers and scholarly math societies (Hoang et al., 2017).

Overall, their efforts were statistically successful. Students in the Statway course, for example, were over 30% more likely to ultimately earn college credit for their efforts than the comparison group (Huang & Yamada, 2017). These positive results were all subgroups accounted for including race / ethnicity and sex. In fact, Huang & Yamada (2017) stated that, “Black females demonstrated the largest gain in college mathematics achievement relative to the baseline performance” (p. 12). Of note, the authors (2017) did state that they had the greatest variation when it came to measuring their partner faculties implementation of the Math Pathways curriculum, and that this variation in how the NIC functions across the different partners would require more investigation (Huang & Yamada, 2017).

### ***Networked Improvement Communities***

The field of implementation science, particularly the study of how well these RBPs are implemented with fidelity in educational contexts, is especially absent in many of these efforts



(Fixsen, Naoom, Blasé & Friedman, 2005), but is frequently an important central component in RPPs. When these partnerships incorporate a continuous improvement cycle (CIC) and share a commonly identified problem of practice they are working to address, they are often labeled Networked Improvement Communities (NICs; Dolle, Gomez, Russell & Bryk, 2013).

NICs can be useful in adopting, implementing, and sustaining educational-based research (Bryk, Gomez, Grunow & LeMahieu, 2015), allowing for information sharing within and between networked schools. Such communities can organize common aims, goals, measures, and languages into actionable school improvements (Cannata, Cohen-Vogel & Sorum, 2017). NICs have been shown to be effective at improving learning outcomes in a range of contexts from community college math classrooms (Clyburn, 2013; Dolle et al., 2013; LeMahieu et al., 2017) to secondary teacher preparation programs (Martin & Gobstein, 2015). However, there is still much more work to be done in determining the effectiveness of a NICs ability to directly improve student learning outcomes through the collaborative learning about, and implementation of, RBPs through a supported CIC.

### **Implementation Science**

Implementation Science includes the study of how well RBPs are implemented with fidelity in the field (Fixsen, Naoom, Blasé & Friedman, 2005). Though the use of implementation science has more recently been applied to many and varied fields, in large part it has been rooted in the social sciences including health care, mental health, social services, the justice system and education among others (Ogden & Fixsen, 2015). At its core, the objective of implementation science is to help narrow the gap between the evidence-based research being exclusively disseminated across innumerable peer-review journals and other miscellaneous publications and actual implementation of the same evidence-based practice into the field where

practitioners (be they doctors, social workers or teachers) are doing the continual day in, day out service for their population in question (Fixsen et al., 2005). Dissemination alone is not enough, and as Fixsen et al. (2005) so expressively put it, “As a field, we have discovered that all the paper in file cabinets plus all the manuals on the shelves do not equal real world transformation of human service systems through innovative practice” (p. vi). In their work on knowledge dissemination and utilization in the health care field Green, Ottoson, Garcia & Hiatt (2009) suggest that there is a very large and very real research to practice gap in which only an estimated 14% of all original research makes its way on to actually benefitting patients. Fixsen et al. (2005) define implementation as, “a specified set of activities designed to put into practice an activity or program of known dimensions” (p. 5). The same authors (2005) go on to define the six stages of implementation as; “(1) Exploration and Adoption, (2) Program Installation, (3) Initial Implementation, (4) Full Operation, (5) Innovation, and (6) Sustainability” (p. 15).

A related framework, The Active Implementation Framework (AIF), from Blanchard, Livet, Ward, Sorge, Sorensen & McClurg (2017) will also be incorporated into this research to help evaluate how the ORPP project was implemented as initially intended, and how it fared according to AIF components. According to the AIF (Blanchard et al., 2017), full implementation of any new innovation can take up to four years. The scope of ORPP implementation for this study was the approximately two and a half years from September 1, 2017 to May 31, 2020, which falls across the first three AIF stages of exploration, installation and initial implementation.

While the AIF was initially developed to help with the implementation of new innovations for the health care field, Blanchard et al., (2017) suggest that it is meant to help “outline suggested mechanisms and strategies to use when attempting to put into practice any

innovation of known dimensions” (p. 922). Ryan Jackson, Fixsen, Ward, Waldroup, Sullivan, Poquette and Dodd (2018), in discussing the potentially broad application of the AIF beyond the field of health care and of particular use in the field of education and school improvement, stated that the AIF is not, “merely another initiative, but a process that can accompany any program, practice, initiative, or mandate and spur effective use or full implementation for the benefit of all children and students” (p. 20). The AIF includes five sections, or framework components, that do not necessarily function in a linear progression. They include: “(1) a Usable Innovation, (2) Implementation Drivers, (3) Implementation Stages, (4) Improvement Cycles, and (5) Implementation Teams” (Blanchard et al., 2017, p. 923). Comparing and contrasting the historical implementation of the ORPP model to the AIF implementation stages and drivers was of particular use to this researcher during this study. It was helpful to see where gaps in planning, design and implementation were.

## CHAPTER III

### THEORETICAL FRAMEWORK

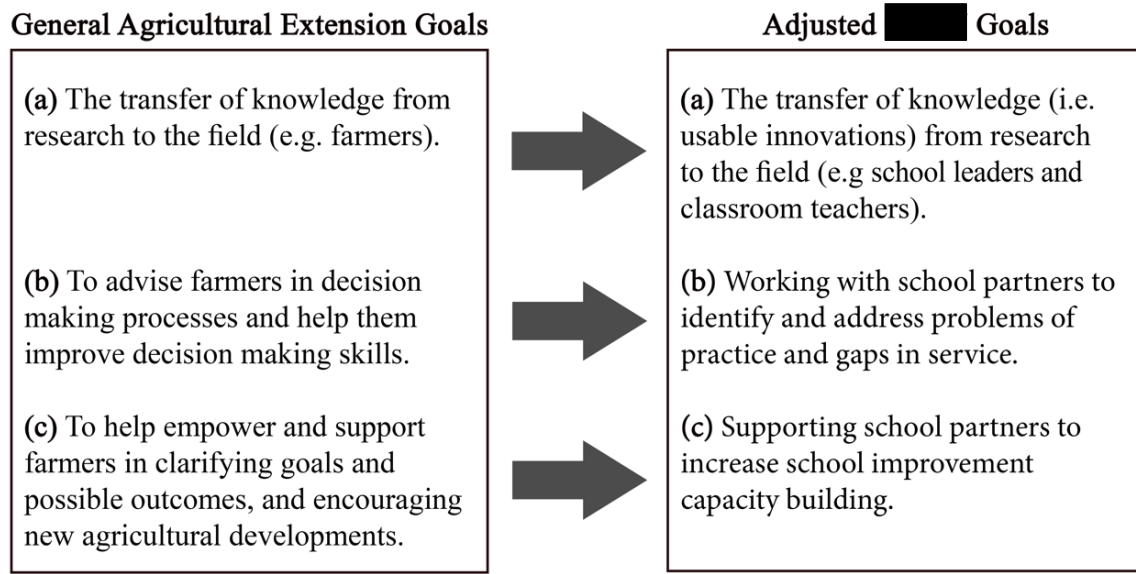
The original intention was for the ORPP to model its output efforts on the long history of the Ag Extension service (R. Kamphaus, personal communication, May 12, 2020). As previously mentioned, they generally acknowledged goals of Ag Extension were to help: (a) transfer knowledge from research to the field (e.g. farmers), (b) advise farmers in decision making processes and help them improve decision making skills, (c) empower and support farmers in clarifying goals and possible outcomes, and encouraging new agricultural developments (Evenson & Pingali, 2007; Jones & Garforth, 1997; Birkhaeuser, Evenson & Feder, 1991). In a sign of the adaptable nature of these Ag Extension services, many now find themselves pivoting away from the classic outreach of helping to increase farm yields, and now are focusing on how to increase incomes and employment levels for small to medium farmers as large multi-national farm outfits, and their private farming technology corporations have been more dominant in the area of science and crop yields since the start of the 21<sup>st</sup> century. Yet, the Ag Extensions three main outreach tenets (as modeled by the ORPP theoretical framework), despite this large shift in overall goal (or maybe problem of practice is more accurate), remains the same (Swanson, 2006; Richardson, 2005).

In acknowledging and mapping these principles of Ag Extension onto the goals of ORPP, this researcher has adjusted them accordingly: (a) *transferring knowledge (i.e. RBPs) to the field* by providing school partners research-based knowledge and practices in needed areas, (b) working with school partners to *identify and address problems of practice and gaps in service*, and (c) supporting school partners to *increase school improvement capacity building*. See Figure 1 below for a side-by-side comparison of the language of these goals. To this researcher's current

understanding at the time of this writing, this theoretical approach is wholly unique to school-based research practice partnerships.

**Figure 1**

*Comparison of Agricultural Extension and ORPP Goals*



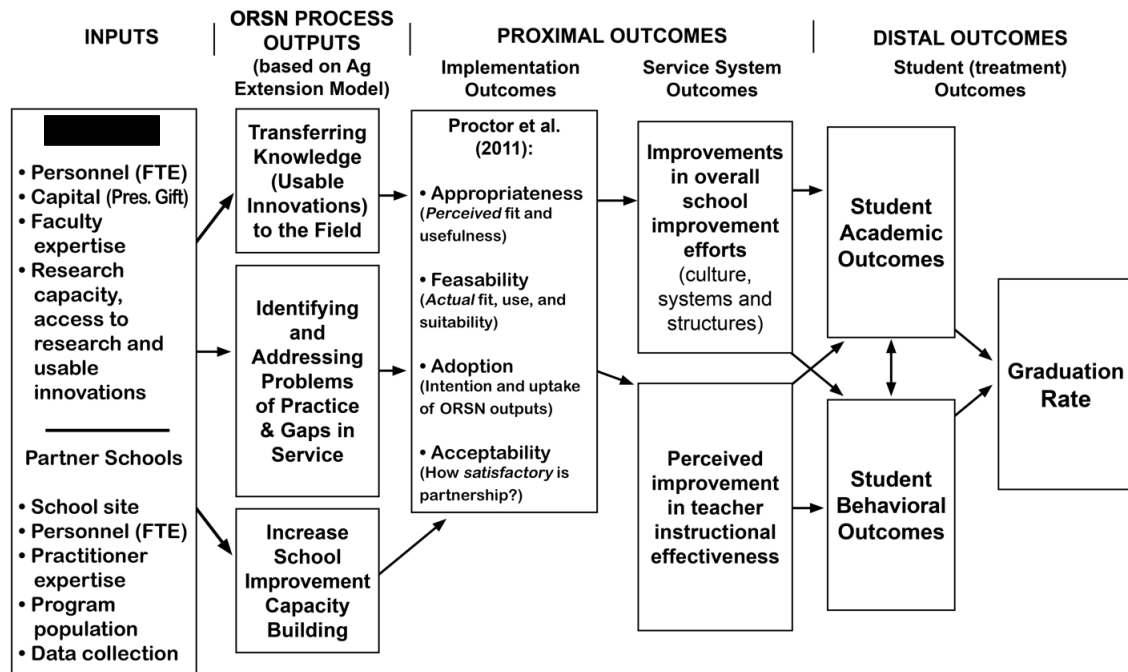
As an organizational framework, the ORPP project most closely resembles an RPP (versus a NIC or other types of school partnerships) as it works with partner schools to improve and sustain the adoption and implementation of RBPs to help increase school and student outcomes (Bryk et al., 2015). The ORPP, like other RPPs, is a networked collaboration that facilitates information sharing within and between partner schools, focusing on shared aims, goals, measures, and improvement efforts to increase school outcomes (Cannata, Cohen-Vogel & Sorum, 2017). ORPP also meets the distinct factors that Coburn, Penuel and Geil (2013) use to define an RPP; to create long term relationships with schools, working in an equitable collaborative partnership, helping to identify and address PoPs, and working towards the production of original analysis.

As the current Logic Model indicates in Figure 2 below, the theoretical framework that underlies the work (process outputs) of the ORPP, evolved from the agricultural extension service model, centers on; (a) transferring knowledge to the field, (b) working with school partners to identify and address problems of practice and gaps in service, and (c) supporting school partners to increase school improvement capacity building. Like the original agricultural extension service has helped farmers increase their crop yields, and is now working to help small to medium size farmers increase economic income and employment levels, the ORPP is working with schools to improve student outcomes, ultimately aiming to increase graduation rates.

The ORPP attempts to work with school partners to transfer and help implement RBPs (i.e. knowledge) where school leaders need it. Needs are determined by ORPP working with school leadership and Courtesy Appointment Clinical Professors (CACPs, aka Lead Teachers) to identify school-specific Problems of Practice (PoPs), and gaps in service areas. School partners complete this identification and strategy implementation process through a program-specific improvement model in collaboration with ORPP administrators. Lastly, the original intent of ORPP was to help increase school partner capacity in numerous ways, including; compensating schools for a portion (approximately 40% of the teachers paid time) of the Lead Teachers contract work time, offering the improvement model documentation, guidance and associated RBPs, and helping to implement those practices within the school through direct assistance, professional development curriculum improvement, and providing access to expert researchers at a university in Oregon.

**Figure 2**

*ORPP Logic Model*



To help determine if ORPP process outputs have been successfully implemented across all four high school sites, the Theoretical Framework for this research project incorporates the proximal Implementation Outcomes as described by Proctor, Silmere, Raghavan, Hovmand, Aarons, Bunger, Griffey and Hensley (2011). Proctor et al. (2011) describe eight separate implementation outcomes (acceptability, adoption, appropriateness, implementation costs, feasibility, fidelity, penetration, and sustainability). However, because of applicability and the early nature of ORPP implementation, again placing the ORPP within the ‘Initial Implementation’ phase according to the AIF, this researcher has chosen to only incorporate (1) appropriateness, (2) feasibility, (3) adoption, and (4) acceptability (Proctor et al., 2011) as the initial proximal outcomes to evaluate initial ORPP implementation.

## **Appropriateness**

Leveraging the work of Proctor et al. (2011), Brownson, Colditz and Proctor (2012), and Rogers (2003) this researcher will use the following definition of appropriateness: The perceived fit, as determined by network participants, of the potential ORPP with the schools existing values, individual setting, and particular needs.

## **Feasibility**

Leveraging the work of Proctor et al. (2011) and Lewis et al. (2015) this researcher will use the following definition of feasibility: The extent to which the new ORPP, and its overarching three process outputs, could have been successfully enacted and utilized within each partner school.

## **Adoption**

Leveraging the work of Proctor et al. (2011) and Rabin (2008) this researcher will use the following definition of adoption: The extent to which ORPP partner schools committed to and engaged with the Courtesy Appointment Clinical Professor (CACP), the ORPP improvement model, and the partnership as a whole.

## **Acceptability**

Leveraging the work of Proctor et al. (2011), Brownson, Colditz & Proctor (2012), and Rogers (2003) this researcher will use the following definition of acceptability: The extent to which ORPP partner school team members (CACP and school administration) perceived the overall partnership to be satisfactory and the ORPP process outputs (e.g. collaboration on knowledge transfer efforts, identifying and addressing problems of practice, and supporting school efforts to increase improvement capacity) adequate and beneficial.

## **The Current Study**



The study will describe and evaluate the processes and experiences of the first two years of implementation of the Oregon Research Practice Partnership to determine the factors and conditions that have led to its current state in order to understand those that could be altered to improve its future outcomes and those of other RPPs. Specifically, the early implementation of the three ORPP process outputs, based on the previously mentioned agricultural extension model, will be evaluated based on the Proctor et al. (2011) implementation outcomes of appropriateness, feasibility, adoption and acceptability. Understanding these factors and conditions will also generate an opportunity to inform other RPPs about how they may improve their early implementation efforts with similar partnerships, allowing for an increased chance of success.

This approach is a novel one, as it aims to incorporate the three established process outputs of the Agricultural Extension model, into the field of public education where the transfer of knowledge takes the form of training and implementing RBPs into schools through professional development and other methods, the establishment of a university based dual credit program in partner schools, the identification and addressing of problems of practice through the ORPP improvement model, and increasing school improvement capacity through the compensated support of the partner schools identified Lead Teacher.

With the overarching purpose of determining the degree to which ORPP has met its proximal implementation outcomes through its original process output efforts, this mixed methods study addresses the following research questions:

1. How *appropriate* was the fit of the original ORPP model (based on tenets of the Agricultural Extension service standard) for each school *prior to the start* of the partnership in the fall of 2017?

2. How *feasible* was the fit of the original ORPP model (based on tenets of the Agricultural Extension service standard) for each school during early implementation from fall 2017 through to May 2020?
3. How has each ORPP partner school differed in their overall *adoption* (including their original intent and eventual uptake) of the output goals from inception through to May, 2020?
4. How has each ORPP partner school differed in their perception of overall *acceptability* of the partnership from inception through to May, 2020?

## CHAPTER IV

### METHODS

#### **Overview of Study Design**

This study centers on a convergent mixed method design, yielding a summative multiple case study. Mixed methods research is often called the “third research paradigm” (Johnson & Onwuegbuzie, 2004) following quantitative research (considered the first paradigm) and qualitative research (considered the second paradigm) methodologies. Quantitative and qualitative purists have long argued the superior merits of their paradigms, while mixed methods researchers argue that a multifaceted approach involving both can often lead to a deeper and more complete investigation of the specific research at hand (Johnson & Onwuegbuzie, 2004). This study uses the succinct definition of Johnson and Onwuegbuzie (2004) to understand the basic role of mixed methods research as, “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (p. 17). While there are numerous complex examples of mixed methods research design, there are three broad, commonly accepted, categories of design: (a) convergent designs, (b) explanatory sequential designs, and (c) exploratory sequential designs (Creswell & Creswell, 2018). This study incorporates a convergent mixed method design, as detailed by Creswell and Creswell (2018) and Creswell and Plano Clark (2017), which brings together both quantitative and qualitative data analysis processes to help combine, corroborate and compare them, allowing for a deeper understanding of the research questions being answered. Unlike the two-phase sequential designs, this process converges the two separately collected and analyzed data, and compares them looking to see how they confirm and / or disconfirm each other (Creswell & Creswell, 2018). For this research project, the focus of this

convergent mixed methods approach will specifically concentrate on assessing the early implementation processes of the first approximately two and a half years of ORPP implementation. See Table 1 below for a visual representation of how the targeted research questions, instruments incorporated and methodologies align.

**Table 1**

*The Alignment of Research Questions, Instrument Data and Study Methodologies*

Research Questions	Instrument Data	Methodology Incorporated
RQ1. How <i>appropriate</i> was the fit of the original ORPP model for each school <i>prior to the start</i> of the partnership in the fall of 2017?	1. DCA documents and coding scheme 2. Semi-Structured Interviews	1. DCA and descriptive statistics 2. Thematic Analysis of Interview Records
RQ2. How <i>feasible</i> was the fit of the original ORPP model for each school during early implementation from fall 2017 through to May 2020?	1. DCA documents and coding scheme 2. Semi-Structured Interviews	1. DCA and descriptive statistics 2. Thematic Analysis of Interview Records
RQ3. How has each ORPP partner school differed in their <i>overall adoption</i> of the output goals from inception through to May, 2020?	1. DCA documents and coding scheme 2. Fall 2019 Teacher PD Survey 3. Semi-Structured Interviews 4. Multicase Study and Cross Case Analysis Worksheets	1. DCA and descriptive statistics 2. Descriptive statistics (frequency) of the Teacher Survey Data 3. Thematic Analysis of Interview Records 4. Multiple Case Study and Cross Case Analysis including Thematic Analysis
RQ4. How has each ORPP partner school differed in their perception of <i>overall acceptability</i> of the partnership from inception through to May, 2020?	1. DCA documents and coding scheme 2. Fall 2019 Teacher PD Survey 3. Semi-Structured Interviews 4. Multicase Study and Cross Case Analysis Worksheets	1. DCA and descriptive statistics 2. Descriptive statistics (frequency) of the Teacher Survey Data 3. Thematic Analysis of Interview Records 4. Multiple Case Study and Cross Case Analysis including Thematic Analysis

*Note.* DCA is an acronym for Directed Content Analysis. ORPP is an acronym for the Oregon

Research Practice Partnership. PD is an acronym for Professional Development.

## **Participating High Schools**

In the 2017-2018 school year, there were approximately 163 classroom teachers within the four ORPP partner high schools, serving approximately 2,800 students. These teachers all had varying levels of education, experience and expertise and taught a wide range of course content. Partner schools have seen changes in the identified lead teacher (CACP) and administrator within the period of time that is the focus of this study (Sept, 2017 to May, 2020). All school and teacher information has been anonymized. The four high schools will be labeled as Spruce High School (SHS), Juniper High School (JHS), Redwood High School (RHS), and Cottonwood High School (CHS).

Spruce High School (SHS) is a suburban school with approximately 45 total teachers and 900 total students. According to the 2017-18 ODE report card release: 67% of students were classified as white, 56% were classified as qualifying for the federal Free and Reduced Lunch (FRL) program, 67% were regular attenders (attending 90% or more of total school days), 71% graduated on-time within four years, and approximately 12% of their teachers were new to the building (Oregon Department of Education, n.d.).

Juniper High School (JHS) is an urban school and one of the most diverse in the state of Oregon. In 2017-18 it had approximately 60 total teachers and 850 total students: 29% of students were classified as white, 61% qualified for FRL, 60% were regular attenders, 73% graduated on-time within four years, and approximately 16% of their teachers were new to the building (Oregon Department of Education, n.d.).

Redwood High School (RHS) is a rural school in eastern Oregon. In 2017-18 it had: approximately 38 total teachers and 760 total students, 71% of students were classified as white, 39% qualified for FRL, 79% were regular attenders, 95% graduated on-time within four years,

and approximately 13% of their teachers were new to the building (Oregon Department of Education, n.d.).

Cottonwood High School (CHS) is also a rural school, located on the southern coast of Oregon. In 2017-18 it had approximately 20 total teachers and 324 total students. It is also a junior / senior high school, so not all of these teachers are technically high school grade level teachers. As of the 2017-18 ODE report card release, 68% of CHS students were classified as white, more than 95% qualified for FRL, 76% were regular attenders, 93% graduated on-time within four years, and approximately 16% of their teachers were new to the building (Oregon Department of Education, n.d.).

### **Data Sources and Measures**

The measures used in this study include; (1) a project-specific Directed Content Analysis (DCA) coding scheme to help measure ORPP implementation, (2) a professional development survey to measure the perceived value of ORPP-led PD by school faculty, and (3) a semi-structured interview protocol to measure ORPP implementation feedback from school collaborators. These measurement efforts conclude in a cross-case analysis (Stake, 2006) multiple case study of the four ORPP partner high schools.

#### ***Directed Content Analysis (DCA) Coding Scheme***

Content analysis has been defined in myriad ways over the numerous decades of its use in social science research incorporating varied qualitative, quantitative and mixed methods (Weber, 1990). For this project, Content Analysis integrates the work of Weber (1990), Hsieh and Shannon (2005), Neuendorf (2002, 2017), Krippendorff (2004) and Mayring (2014) among others to help define it as a systematic technique of objective inferential analysis of the characteristics of identified communications. Content Analysis (CA) can include the analysis of

a near infinite array of communication types ranging from books, newspapers and other print media to text messages and Tweets, wordless works of art, song lyrics and recorded speeches (Neuendorf, 2017). Mayring (2014) likens all CA as a form of mixed-methods research, incorporating both qualitative and quantitative steps, such as the assignment of categories and codes to certain text as a qualitative step, and analyzing frequencies of categories as a quantitative step.

CA was selected as the most suitable technique to analyze documented ORPP process output efforts from September 1, 2017 to May 30, 2020 to help determine how well it endeavored to reach its proximal implementation outcome goals (appropriateness of fit, feasibility of fit, adoption by school partners, and acceptability of the partnership by school leadership). According to Weber (1990), CA encompasses a broad range of flexible analytic approaches that the researcher selects from, based on both the interests and goals of the researcher and the problem(s) being studied. According to Hsieh and Shannon (2005) *directed* content analysis (DCA), one specific approach within the broad range of CA, is explicitly meant to “validate or extend conceptually a theoretical framework or theory” (p. 1281). The deductive approach of DCA allows a researcher to use a more structured CA method by using components or ‘key concepts’ of the existing theories as initial coding categories on the coding scheme (Hsieh & Shannon, 2005). The deductive aspect of DCA in this case simply refers to creating the codebook prior to coding (Mayring, 2014). The theoretical frameworks incorporated into the coding scheme for this study are the three previously discussed ORPP process outputs, based on the foundational Agricultural Extension model, as defined by Evenson and Pingali (2007) Jones and Garforth (1997) and Birkhaeuser, Evenson and Feder (1991) and the four relevant Implementation Outcomes of Proctor et al. (2011).

Among CA literature, there are different terms used for the coding scheme, which is defined here as the documentation that includes the definitions of variables and coding details, coding instructions and procedures, and the forms and formats for actual coding. While Neuendorf (2017) uses the term ‘codebook’ and Krippendorff (1980) uses ‘classification scheme,’ Weber (1990), Hsieh and Shannon (2005) and Mayring (2014) use ‘coding scheme’ (though Mayring uses both a coding scheme and a coding guideline), which this researcher is combining into the single term of ‘coding scheme’ for simplicity. For this study, this researcher will use the term *coding scheme* to mean the measurement instrument that includes the complete documentation set for both coding instructions and coding forms and data capturing. See Appendix A for the revised final coding scheme.

### ***Teacher Professional Development (PD) Survey***

A survey aimed at gathering data from ORPP professional development experiences of licensed teachers was developed by a Research Associate Professor within the College of Education at University of Oregon, and myself. The survey is meant to examine teacher perceptions of ORPP-supported professional development (PD) that was developed, organized, and implemented by ORPP staff and the Courtesy Appointment Clinical Professor (aka ‘Lead Teacher’) working in our partner schools. Survey content was derived from research on teacher professional development by Garet, Porter, Desimone, Birman and Yoon (2001) and Guskey (2002). While this researcher assumes a certain level of face validity based on the survey content, the experience of the instruments co-developers and the scholarship it was based upon (Hardesty & Bearden, 2004; Nunnally & Bernstein, 1994), the survey itself has not been investigated for validity beyond this and any such future efforts are beyond the scope of this



project. In addition, because the survey data was only captured this one time across all four schools it is not possible to make any judgements to its test-retest reliability.

Teachers at ORPP-partner schools completed ORPP-supported PD surveys prior to the fall of 2019. However, there were mistakes in the capturing of the survey data, which included a mistake in the question which asked teachers which school they were working at. For this reason, and additional complexities including the editing of several questions, only the fall 2019 survey data is included in this research. Initially, there were plans to collect at least two more time points for survey data collection for this research, but because of the spread of COVID-19 in the winter and spring of 2020 and beyond, all future plans to collect multiple rounds of survey data from the same participants was halted.

The survey aims to probe teachers about different aspects of their teaching history and experience, as well as their perceptions of value and use of the ORPP-supported PD they have participated in up to that point in the school year, and how they perceive leadership support of that PD. Items important to this study include questions that concern staff perceptions of:

- Administrator support for ORPP PD
- General teacher support for ORPP PD
- Value of ORPP PD
- Consistency of ORPP PD with their needs, and
- Quality of ORPP PD

There are several question types included in the survey, including simple multiple-choice questions, questions with Likert Scale-type answers, and several open-ended questions. There is a total of 43 questions. See Figure 3 below for an example of a Likert Scale-type question and Appendix B for the complete ORPP teacher PD survey.

### Figure 3

#### *Teacher PD Survey Question Set Example*

Regarding the professional development this year, please mark your most accurate feelings regarding the following statements.				
	Strongly Disagree	Somewhat Disagree	Agree	Strongly Agree
I liked the professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My time was well spent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The material made sense	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leader was knowledgeable and helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### ***Educator and Educational Leader Interviews***

Interviews of all ORPP-affiliated educators and educational leaders were completed through live using a web conference platform. Interviews included guidance from Creswell and Creswell (2017) and Creswell (2015) and followed a project-specific semi-structured interview protocol measure specifically developed for this project. This protocol was developed prior to conducting the interviews and was informed by the completed DCA and teacher PD survey analyses. It is comprised of seventeen total open-ended questions including six separate sub questions allowing for further exploration of topics when appropriate (Creswell & Creswell, 2017). See Appendix C (C.1 & C.2) for the complete interview protocols. Interviews will be used to answer the third and fourth research questions.

#### ***Multiple Case Study and Cross-Case Analysis***

In a multicase study, multiple, yet similar and related cases, or instances of an organization, are examined. Each case study describes its own relationships and problems. Through the study of the different cases and how they relate to each other, a greater understanding of the larger organization of ORPP and its implementation practices can be derived, particularly through the use of cross-case analysis (Stake, 2006). In cross-case analysis

the goal is to look for similarities and (importantly for this study in particular) differences in the separate cases. For this study, it is important to find differences in how ORPP was implemented, adopted and accepted across the four high schools to help shed light on how the relationship with individual high school personnel impacted the proximal implementation outcomes this researcher is concerned with. Stake's (2006) Cross-Case Analysis includes nine steps (each with its own worksheet) to help guide the analytical process. They include:

- Worksheet 1. Graphic Design of a Case Study
- Worksheet 2. The Themes (Research Questions) of the Multicase Study
- Worksheet 3. Analyst's Notes While Reading a Case Report
- Worksheet 4. Ratings of Expected Utility of Each Case for Each Theme
- Worksheet 5A. A Matrix for Generating Theme-Based Assertions from Case Findings (Track I)
- Worksheet 5B. A Matrix for Generating Theme-Based Assertions from Merged Findings (Track II)
- Worksheet 5C. A Matrix for Generating Theme-Based Assertions from Important Factor Clusters (Track III)
- Worksheet 6. Multicase Assertions for the Final Report
- Worksheet 7. Planning the Multicase Final Report

## **Procedures**

Data collection and analysis procedures were completed in the following order: (1) Directed Content Analysis coding scheme development, document (data) collection and processing, quantitative inter-coder reliability analysis and directed content frequency analysis of selected ORPP-related documents, (2) quantitative descriptive statistical analysis of teacher

survey data on ORPP-led professional development, (3) qualitative analysis of the semi-structured interviews with ORPP-affiliated educators and school leaders, and (4) mixed-methods cross-case analysis incorporating all previous analysis.

### ***Directed Content Analysis (DCA) Data Source Collection***

A stratified sampling process was used to collect a smaller proportion of ORPP process output documents for the Directed Content Analysis (DCA). The reason to sample the ORPP documents is because the number was simply too large and beyond the capability of this project when you include all ORPP related emails from September, 2017 through to May, 2020. Stratified sampling was used because some documents have more investigative value than other documents, so just doing an across the board random sampling would not have been as effective. As Krippendorff (2003) states, stratified sampling, “recognizes [values] distinct subpopulations (strata) within a population” (p. 115). For this researchers’ purposes, the different subpopulations (aka strata) are the different forms of documentation that will be included for the DCA. The following is an explanation of the different strata used for this project.

**Emails.** Emails from both this researcher, and the Director of ORPP from September 01, 2017 to May 31, 2020 that mentioned any of the following keywords were collected; ORPP, The Oregon Research Practice Partnership, CACP, Courtesy Appointment, Courtesy Appointment Clinical Professor, and / or Lead Teacher as well as the names of all four of the anonymized schools (SHS, JHS, RHS and CHS)

Initial collection resulted in over 20,000 separate emails between the Director of ORPP and myself during this identified period. This included many emails that had nothing to do with the actual ORPP, even though the initial group was identified through keyword search. For example, “ORPP” was a key word used, but many emails included this term in a frequently used

email signature. A cleaning process was undertaken that included exporting .OLM files from both my official university email address as well as the email of the ORPP Director, with IRB protocol #05152018.022, that included any and all of the key words mentioned previously. After this export, the Excel-based cleaning process broadly included:

- Converting and importing both .OLM compressed email files into .CSV documents that could be manipulated in MS Excel.
- Using the SUMPRODUCT formula to create true / false markers for all emails to allow for a much deeper search of many key words that existed in the email text looking for things like the names of partner high schools, last names of educator partners, etc. and then removing all emails that returned a false statement upon a closer inspection of them.
- Using a keyword removal list that marked emails from certain email addresses that did not pertain to ORPP work, keywords that had nothing to do with ORPP work such as ‘makerspace’, or the removal of spam / promotional emails from companies like “TechSmith” (and their video production software “Camtasia”) that have nothing to do with ORPP partner work. See Appendix D for a detailed list of steps and keywords included in this thinning process.

Eventually, the 20,000 plus emails were narrowed down to 3,321 emails that did not include any keywords marked for removal, and that all included at least one keyword marked as applicable for this work. A process was then undertaken to anonymize all emails, removing names and email addresses within the emails themselves, initially meaning to replace all school identifiers with coded language such as “School 1, Admin 1” or “ORPP Admin 1” and “ORPP Admin 2.” Unfortunately, a mistake was made in the process to anonymize all of the emails for

this phase of work and by the time this researcher realized the error it was far too late to try and go back and address the issue. This ultimately meant that a serious limitation was created by this researcher. While the DCA process was still able to be completed, what this limitation meant was that the analysis could not be separated by school and DCA results could not be compared by school.

**ORPP Organizational and Administrative Documents.** These documents were also collected in a similar fashion to the original emails. An initial collection of files that mentioned the following language; ORPP, The Oregon Research Practice Partnership, *and* at least one of the following: MOU, Memorandum of Understanding, Schedule, Calendar, Job description, Job duties, Contract, Plan, Work Plan, Presentation, Personnel, Employment, Project, Project Development, and / or Protocol as well as the names of all four of the anonymized schools were collected. This resulted in 64 total individual documents after copies from the two separate file grabs were discarded. Multiple versions (different iterations) of files were kept. A similar anonymization process was also completed for these as well.

**ORPP Related Collaboration Documents.** Documents were similarly mentioned the following keywords were also collected: ORPP, The Oregon Research Practice Partnership, *and* at least one of the following: CACP, Courtesy Appointment, Courtesy Appointment Clinical Professor, Lead Teacher, Improvement, Improvement Model, EBP, Evidence-based Practice, Research-based practice, Usable Innovation, Research, Improvement Plan, Strategy, Driver, Implementation, Professional Development, PD, Plan, Data, Data collection, Survey, Dual Credit, College credit, Culture, System, and / or Structure as well as the names of all four of the anonymized schools. This resulted in 109 total individual documents after copies from the two separate file grabs were discarded. Multiple versions (different iterations) of files were kept. An

identical anonymization process was completed for these files as well. The total number of ORPP work related documents was,  $n = 173$ .

Once these documents were collected and completely anonymized, emails and files from each strata were randomly selected in proportion according to an a priori definition. Neuendorf (2002) states that, “the reliability subsample should be at least 10% of the full sample, probably never be smaller than 50, and should rarely need to be larger than about 300” (p. 263). This project used the following a priori subsample strata definitions; Emails (15%), *ORPP Organizational and Administrative Documents* (50%), *ORPP Related Collaboration Documents* (50%). This resulted in 495 separate emails and a combined 87 total ORPP-related files, for a total DCA document sample of,  $n = 582$ . The Research Randomizer website (<https://www.randomizer.org/>) was used to generate random ID numbers for all documents, allowing the researcher to select those identified emails and documents for DCA. This randomization device helped to ensure each document, or unit, had the same probability of being selected for analysis (Krippendorff, 2003).

The coding scheme for this project was developed using the free Qualitative Content Analysis Map (QCAMap) tool developed by Philipp Mayring and Thomas Fenzl, who are both well respected researchers with expertise in content analysis (“Associating for Supporting”). While Mayring (2014) frequently labels content analysis as qualitative content analysis (QCA), he reasons that it is actually a “mixed methods approach: assignment of categories to text as qualitative step, working through many text passages and analysis of frequencies of categories as quantitative step” (p. 10). The QCAMap website lets you create custom coding schemes for content analysis on any given subject using any sort of content that is text or image file based. The QCAMap coding scheme template is broken down by categories and sub-categories,

ultimately creating a scoring rubric-like document, with supporting information (e.g. rules and guidelines) for coders. The categories and sub-categories include; (1) The question for analysis, (2) the content analytical technique, (3) the content analytical unit, (4) the context unit, (5) the recording unit, and (6) scoring categories.

Mayring and Fenzl offer numerous support document for users to complete content analysis processes using the QCAMap tool. First is an open access paper by Mayring (2014) titled *Qualitative content analysis: theoretical foundation, basic procedures and software solution*, which includes an overview of the content analysis process, but also goes into detail about the QCAMap tool. The second is the QCAMap Step by Step Software Handbook provided by Mayring, Fenzl and their research team (Mayring, 2020). The handbook goes into much greater detail on the technical use of the QCAMap tool. This is in addition to numerous other scholarly works by both researchers that include details on QCAMap use.

For this researchers' purposes, the QCAMap website was used to create a coding scheme that links the three ORPP process outputs to the selected Implementation Outcomes from Proctor et al. (see Theory of Change model previously discussed; 2011). Essentially, this investigation is determining how those ORPP process outputs were distributed across Proctor et al's. (2011) four proximal implementation outcomes during the time in question. The quantitative aspect of the DCA for this project helps to shed light on the frequency with which the three ORPP process outputs were mentioned relative to the implementation outcomes in both work emails between ORPP partners, and the working documents that the partnership created and used. The qualitative aspect of the DCA helps determine how the process output occurrences measured impacted eventual implementation outcomes. For example, the appropriateness outcome measures the perceived fit of the ORPP *prior to initial implementation*. The DCA incorporated a random



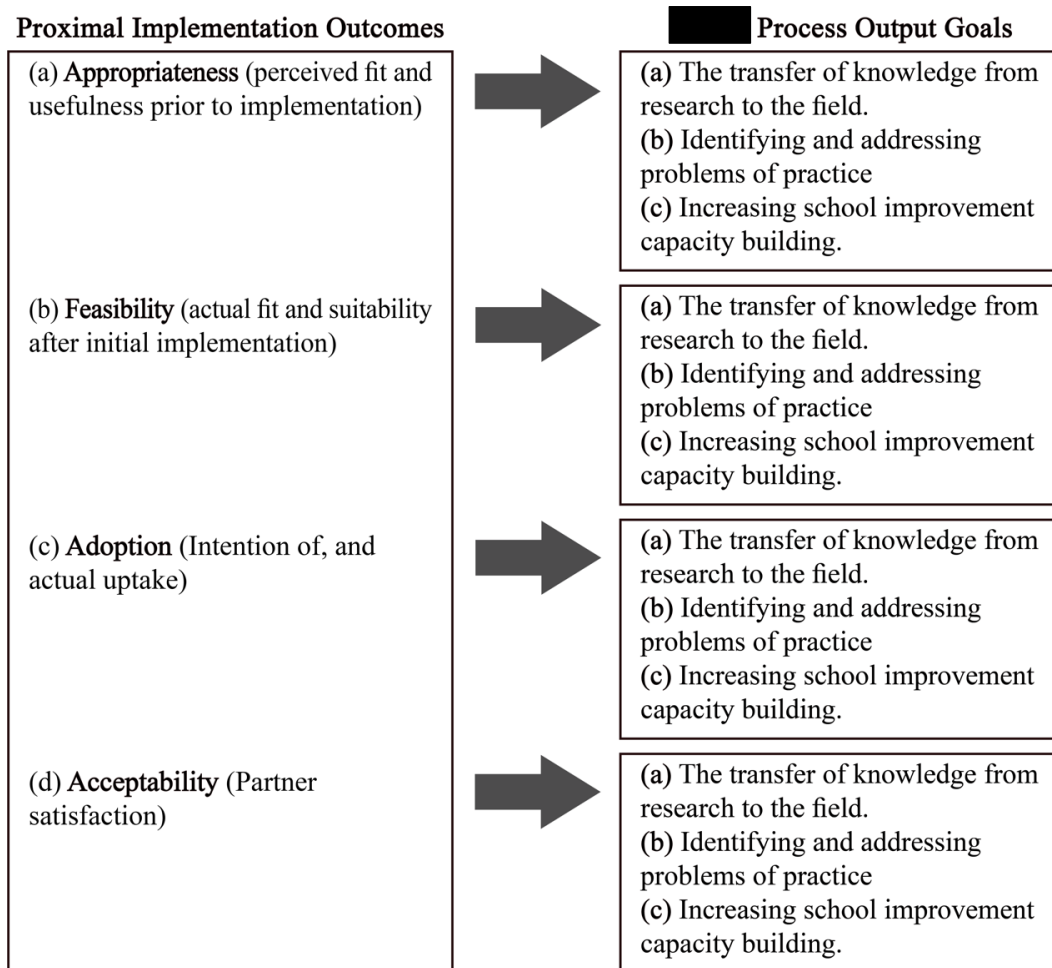
sample of documents from prior to the first meeting of the ORPP-partner schools and teachers. The analysis process then explored how often certain keywords and phrases appear in the documentation that relate to school improvement capacity (along with the other two process outputs) prior to the start of the actual ORPP collaboration (e.g. keywords and phrases such as ‘capacity,’ ‘time,’ ‘not enough time,’ ‘bandwidth,’ ‘help,’ ‘assistance,’ ‘support,’ ‘busy,’ and ‘too busy’).

Using the QCAMap tool, this researcher first constructed a complete draft iteration of the coding scheme that connects the four implementation outcomes of Proctor et al. (2011) to the three separate ORPP process outcomes, leveraging the agricultural extension model. Meaning, the DCA coding scheme incorporated specific subsections to identify language (keywords and phrases) from each of the three ORPP process outputs. As this researcher is very familiar with the day-to-day functions and outputs of the ORPP, this was done without incorporating any specific documentation coding (e.g. emails etc.) as some researchers such as Bogdan and Biklen (2007) suggest when creating these types of coding schemes. See Appendix E for the QCAMap website representation of the coding scheme (an earlier version without the final defined context unit), and how it looked for independent coders to work with it. See Figure 4 below for a simplified explanation of how proximal implementation outcomes were connected to each separate ORPP process output goal for the DCA coding scheme.

**Figure 4**

*Coding Scheme Connection of Proximal Implementation Outcomes to Separate ORPP Process*

*Output Goals*



The general steps of creation, revision and final use of the coding scheme measure throughout the entire DCA process largely followed Weber's (1990) example:

1. Definition of coding scheme units (e.g., words, phrases, sentences, etc.)
2. Definition of the initial first iteration of the coding scheme itself
3. Test of coding on sub-sample of sampled text
4. Assessment of accuracy and reliability of sample coding
5. Final potential revision of coding rules, coding categories, and definitions

6. Return to Step 3 until sufficient reliability is achieved
7. Coding of all text

**Step 1.** The first iteration of the coding scheme incorporated the following key words and phrases for each deductive category and sub-category of outputs and proximal outcomes:

*Appropriateness:* Appropriate, compatible, perceived fit, relevant / relevance, related, suitable, useful, valuable, beneficial, helpful, practical, fitting / fit(s) / good fit, appreciated, proper, right / correct, applicable, match / matched / well-matched, connected / interconnected, support / supporting / supported.

*Feasibility:* Feasible, possible, viable, carried out, suitable / suited, practical / practicability, ready / readiness, to use, incorporate, include, integrate, intend, intention to try, to try / going to try / trying.

*Adoption:* Uptake, apply, utilization, use of / use of innovation / use of research, employ / deploy, employed, engaged, knowledge transfer / to transfer knowledge, to use / to incorporate / to include / to integrate, enact, implement / to implement / implementation / implemented.

*Acceptability:* Acceptable, satisfactory, adequate, useful, practical, reasonable, suitable, ample, value / valued / valuable, beneficial, appreciate, positive, favorable, enthusiastic / unenthusiastic, excited, constructive, negative.

*Transfer of knowledge:* Evidence-based practice, EBP, Research-based practice, RBP, research evidence, research, researcher, faculty, usable innovation, innovation, evidence-based curriculum, evidential basis, research information, curriculum, resource(s), evidence, access to, publication / journal article, library.

*Problem of practice and gap in service:* Problem of practice, problem, POP, gap, gap in service, service gap, challenge, issue, difficulty, setback, dispute, concern, failure, not meeting

needs, lack of improvement, lack of, not enough of, keep trying to, school climate / culture, school system, school structure, instruction / instructional effectiveness.

*School improvement capacity:* Improvement / school improvement, improvement efforts, capacity, time, increased time, bandwidth, team, delegate, delegation, partnership, work with, collaborate, leadership, administration, leadership team, instructional leadership team, extra, additional, increase / increased.

**Step 2.** A complete initial draft of the coding scheme was created and entered into the QCAMap tool online. Coding scheme content experts were sought out for consultation on the initial draft. While one of these coding scheme experts did respond to an initial email, they were not able to provide feedback in a timely enough manner for this project. At their request, I did send a 2-page document that included some background on the project, and the first draft coding scheme, but did not ever receive feedback afterwards. Several emails after this went unanswered. No other emails from other CA experts were ever answered, even with multiple attempts over several months. However, the content analysis website of Mayring and Fenzl ([qualitative-content-analysis.org](http://qualitative-content-analysis.org)) that supports the QCAMap tool, as previously mentioned, offered a considerable amount of support documentation which was extremely helpful in the development of the initial coding scheme. Neuendorf also has an entire website dedicated to content analysis, coding schemes, and supporting early researchers in the use of content analysis ([https://academic.csuohio.edu/neuendorf\\_ka/content/index.html](https://academic.csuohio.edu/neuendorf_ka/content/index.html)) which was also helpful.

For content analyses, including DCA, to be both valid and reliable, the proper development, implementation, and eventual analysis of the entire coding scheme is critical. An individual pilot of the first coding scheme iteration was conducted by this researcher using twenty randomly selected documents, with an even mix of them coming from emails and other

ORPP work documents. These results were then used to further define the coding scheme, adding additional details to the Context Unit, key words and phrases (including the addition of antonyms), the incorporation of anchor examples, and the addition of coding rules and guidelines for intercoder reliability testing of the coding scheme. These updates and coding rules and guidelines documents were presented and discussed with the additional two original coders recruited for this project. See Appendix F for a timeline of independent coder training leading up to *Step 4* below.

***Step 3.*** Prior to test coding with a sub-sample of documentation data, a data source collection process was completed which included the collection, anonymizing and processing of ORPP emails and work documents for the DCA. Afterwards, a second draft of the coding scheme was tested on a sub-sample of collected ORPP output documentation data using two scorers, including this researcher. The initial intent was to have three independent coders (including this researcher), but one was unable to complete the intercoder work. This is detailed in the Analysis section below. Procedures and processes were put into place to ensure coding was reliable and accurate, with the goal of yielding the same results over multiple coding efforts by separate coders ensuring the coding scheme was able to produce reliable results each time used.

***Step 4.*** To assess the accuracy and reliability of sample coding, inter-coder reliability with two coders was completed using ten percent of the randomly sampled and stratified documents collected for content analysis, 49 emails and 9 ORPP work document, (n = 58). Neuendorf (2002) states 10% to 20% is appropriate to measure for reliability. The second coder was recruited from College of Education undergraduate students and was paid \$15 an hour across a total of 30.35 hours from May 2021 to August 2021. Scorer training was completed

prior to test coding over several live synchronous video conference calls. Topics covered during the training included; the theoretical concepts included within the scope of this project (ORPP process outputs and the tenets of agricultural extension, as well as the Proctor et al. (2011) proximal implementation outcomes), review of the basics of content analysis and DCA specifically, common traits of the documents themselves and the coding scheme. During this initial first training, coders scored ten documents with alignment discussion throughout. Additional details on inter-coder reliability training and processes are covered in the Analysis section below.

**Steps 5-7.** Finally, the coding scheme measure went through a final revision of coding rules and guidelines, coding categories, and definitions based upon results from the sample coding from the previous steps. As Step 6 (Weber, 1990) requires, Steps 3 and 4 were repeated until sufficient reliability was reached. Once this happened, coding and analysis of all of the randomly sampled ORPP process output documentation took place, which is described in detail below in the Analysis section.

### ***Quantitative Descriptive Statistics of Teacher PD Survey Data***

The survey was offered to teachers digitally through an Oregon universities Qualtrics survey administration tool and took approximately 15-20 minutes on average. The only individually identifying feature of the survey was asking what school the teacher worked at, and for them to add a signature to the start of the survey acknowledging their consent in participating. The teacher PD survey, and permission for data collection, were given an exempt status rating from a university in Oregon's Internal Review Board (IRB) on May 22, 2018 and is currently approved through May 21, 2023. Its IRB Protocol Number is, 05152018.022 and qualified for exemption as per the Common Rule regulations found at Title 45 CFR 46.101(b)(2).

For the purposes of this study, ORPP-partner teacher survey data was already collected during the months of October and November of 2019. It was meant to help gather data on the perceptions of ORPP-led PD delivery up to that point in the school year. The first part of the school year (August through December) is when the majority of PD is commonly delivered<sup>1</sup>. This data had not been examined other than to report to Lead Teachers and their school administration what percentage of staff completed the surveys. No raw data had been analyzed further or been provided to ORPP Schools.

### ***Thematic Analysis of Educator and Educational Leader Interviews***

Nine interviews of current and former teacher leaders ('CACPs') and building administrators involved with ORPP were completed for this study (Cottonwood High School: 2, Juniper High School: 2, Redwood High School: 3, Spruce High School: 2)<sup>2</sup>. One teacher leader and one administrator were not available for interview. Interview transcripts were used as intact open-ended explanations provided by key informants to help understand more deeply answers to research questions three and four regarding aspects of early ORPP implementation. Transcripts were also combined with my notes taken during the interviews to give a more thorough opportunity to understand interviewee points of view and opinions. Thematic analysis of the semi-structured interviews helped to qualitatively examine areas of historical implementation across the ORPP with the four separate high schools. Using guidance from Braun and Clarke (2006) thematic analysis of the standardized open-ended semi-structured interviews followed

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<sup>1</sup> Initially, the goal was to utilize a second round of teacher PD data, collected in the spring of 2020. While that data was still collected, because of the global Corona Virus / COVID-19 Pandemic, and the shift of public K12 education from in-person school to online distance learning, the second round of teacher PD survey data will not be incorporated into this study. This is due to the fact that delivery of PD at each partner high school was either dropped completely, or highly modified from its original ORPP-supported PD to emergency PD, focusing solely on all teacher's mandatory shifts to online learning and lesson delivery, so it was not included.

<sup>2</sup> As a precursor, an initial asynchronous interview with Dean Kamphaus was already conducted for the purpose of adding ORPP implementation background to this study. This interview took place over email, with questions included in Appendix C.1. Interviews with school-side ORPP partners included similarly open-ended questions.

their six steps which coalesce around data familiarization, initial code generation, searching for themes, reviewing themes, defining and naming themes and reporting (p. 87). Thematic analysis of interview responses helped to shed light on the early implementation of ORPP across school sites and the similarities and differences within those schools, indicating potential strengths and weaknesses of implementation at each site, allowing for greater detail in cross-case analysis for the multiple case study.

### ***Multiple Case Study and Cross-Case Analysis***

At the heart of cross-case analysis is the idea of a multicase study (Stake, 2006). This analysis integrated the prior various data collection and analyses into a multiple case study that examined and evaluated the overall implementation process of ORPP and the relationship between ORPP and the four high schools within the overall RPP.

Case-Study Synopses using the previously articulated steps of Cross-Case Analysis by Stake (2006) of all four ORPP high schools were completed to help answer the research questions for this study, which were particularly helpful for research questions three and four. Cross-Case Analysis incorporated previous mixed methods analyses into it, resulting in an in-depth assessment of each partner school and its experience in early ORPP implementation. The multiple case study design took direction from Stake's (2006) Cross-Case Analysis framework, the Thematic Analysis of Braun and Clarke (2006) and general guidance from Creswell and Creswell (2018) and Creswell and Plano Clark (2017).

The goals of this multiple case study and the cross-case analysis were to help: (a) Determine the depth that the ORPP model and its process outputs were implemented in each partner school in the first two and a half years, (b) determine themes that emerge across the partnership, and (c) determine potential assertions of what could have been improved.



## **Analysis**

Analyses used in this mixed-methods study included; (1) the Directed Content Analysis (DCA) of historical ORPP implementation documents (emails and work documents), (2) quantitative descriptive statistical analysis of teacher PD survey data, and (3) thematic analysis of educator and educational leader interviews, which (4) culminate in the cross-case analysis of the ORPP model, to determine the level of proximal implementation outcomes at each partner school site. Analysis within the convergent mixed method design was conducted in two phases. The first phase included the initial qualitative and quantitative analyses (i.e. the DCA, the descriptive statistical analysis of teacher PD survey data, and the thematic analysis of educator and educational leader interviews) in the order described here. The second phase incorporated those first phase findings into a second summative phase that concluded with the cross-case thematic analysis resulting in the multiple case study and final conclusions answering each research question.

### ***Directed Content Analysis (DCA)***

The DCA process, as detailed in the procedures section above, was the first and most lengthy analysis completed for this project. Documents were collected, filtered for appropriateness, stratified, and randomly selected for both the inter-coder reliability testing as well as eventual full coding and analysis for this project.

**Inter-coder reliability.** Inter-coder reliability was important for this particular research project, as with all content analysis, because it helped to ensure that the subsequent coding by this single researcher of the randomly sampled ORPP process output documentation was coded and analyzed accurately. Without this guarantee, the resultant findings of the DCA would have been worthless (Neuendorf, 2002). An acceptable inter-coder reliability coefficient showed that

the two separate coders were able to evaluate the characteristics of the documents accurately and reach the same conclusion, which ultimately helps prove the coding scheme is accurate and reliable (Lombard, Snyder-Duch & Bracken, 2002; Neuendorf, 2002).

Again, according to Neuendorf (2002), 10% of the total subsample was randomly selected for the inter-coder work, which amounted to 58 total documents. The same a priori stratification was used, resulting in 49 random emails (10% of the 495 randomly selected emails) and 9 random work documents (10% of the combined 87 randomly selected ORPP-related documents) being selected and coded between the two independent coders.

Initially this project aimed at having three coders (this researcher and two undergraduate students) independently code these documents to determine an appropriate level of intercoder reliability of the coding scheme. Unfortunately, one of the coders who worked on the team from May, 2021 through to the middle of July, 2021 was not able to complete the final coding work. They are an international student who traveled back to their home country for the summer. As they arrived in their home country they were required to be in quarantine due to country-wide COVID-19 protocols for two weeks. This delay could have been manageable, but after they completed quarantine they were not able to access the QCAMap tool because of the countries strict internet access policies. Approximately three weeks after their quarantine was completed, they were finally able to get an email to me stating they were not able to continue coding work. To move forward, it was determined that the same number of emails and work documents were to be independently coded by myself and the remaining undergraduate coder as this amount remained consistent according to the minimums set by Neuendorf (2002).

Coded data for each of the four Proctor et al. (2011) proximal implementation outcome variables was collected from the QCAMap tool, exported and initially transferred to MS Excel.

The early goal was to be able to export the data directly out of the QCAMap tool into MS Excel without having to hand code each email and document, but ultimately this became too challenging. There were too many slight variations in how each coder could possibly code the text for identification of the variables in question. While there are likely some very creative and complex methods which would have allowed MS Excel to recognize these slight differences in coded text in an automated fashion, it was beyond the skill and knowledge of this researcher. The QCAMap tool is also limited in this fashion, as it also does not have the capability to compare coding, only show what was coded and by who. To highlight this challenge, in Figure 5 below, you can see an example of both coders, coding much the same text, though Coder 2 (the second example below) extends their marking to the second sentence in question. In this example, this additionally marked text should not mean that the two instances of coding are different. They both still accurately record an emailed instance of the school's adoption of the ORPP CACP / lead teacher personnel into their school and their efforts to increase school improvement capacity. Because of the challenge this posed in recording accurate coding match details in an automated fashion within MS Excel by using various formulas and other automation techniques, it was decided that hand coding the QCAMap export data into MS Excel was the best option, regardless of how much more time consuming it was.

## Figure 5

Example of QCAMap tool coding differences between Coder 1 and Coder 2

### Coder 1 Text Marking:

RQ2-4\_Email\_28-28.txt  
1263 7/11/2019 10:56 RE: Oregon Research Practice Partnership website  
prototype "Hi [REDACTED] Admin 2, below is the list of [REDACTED] personnel and FTE  
for this past year. This information and more detailed costs can be found on  
the personnel tab of the ledger report (attached). I'm happy to go over this  
anytime. FYI, the ledger has been reconciled through June, but some of these  
expenses will be moved over to the new FY20 ledger after this one is closed  
out.

QCAMap annotations: RQ3-3 (left and right), Building School Improvement Capacity (bottom left)

### Coder 2 Text Marking:

RQ2-4\_Email\_28-28.txt  
1263 7/11/2019 10:56 RE: Oregon Research Practice Partnership website  
prototype "Hi [REDACTED] Admin 2, below is the list of [REDACTED] personnel and FTE  
for this past year. This information and more detailed costs can be found on  
the personnel tab of the ledger report (attached). I'm happy to go over this  
anytime. FYI, the ledger has been reconciled through June, but some of these  
expenses will be moved over to the new FY20 ledger after this one is closed  
out.

QCAMap annotations: RQ3-3 (left and right), Building School Improvement Capacity (bottom right)

Where evidence of the Proctor et al. (2011) implementation outcomes were found to co-exist with one of the three ORPP process outcomes as mentioned or referenced within a given email or ORPP work document, that text was highlighted by the coder. For example, one coded section of email or work document text included the co-existence of language of both *adoption* (e.g. ‘We are going to start *implementing*...’) and the *transfer of knowledge* (e.g. ‘Can you help us locate an *RBP* for problem-based learning approaches...’). In this way, the twelve total variables were coded, where one of the four implementation outcomes matched, or co-existed, with one of the ORPP process outcome goals. Again, see Figure 5 above.

As Neuendorf (2002) states, “reliability coefficients should be reported separately for every measured variable” (p. 236) and suggests an .80 or greater agreement reliability coefficient

would be acceptable to all, and that “.60 or greater would be acceptable in most situations” (p. 236). Krippendorff (2013) suggests a similar threshold for their own Krippendorff alpha ( $\alpha$ ), which was used here to determine the level of intercoder reliability for the DCA coding scheme, stating that researchers may rely on results above .80, and may, “consider variables with reliabilities between  $\alpha = .667$  and  $\alpha = .800$  only for drawing tentative conclusions” (p. 325). For this project, it was determined to follow the advice of Krippendorff, aiming for alpha results at or above .80, but willing to consider results between .667 and .80 as well.

All of the DCA variables for this project incorporate nominal data as the coding will simply be marking where the co-existence of these categorical elements appears, such as the coding example seen in Figure 5 above. Neuendorf (2002) discusses common reliability statistics for use with content analysis, and because data will be nominal in nature, and two scorers will be used, Krippendorff’s alpha ( $\alpha$ ) was selected as the most appropriate to test for intercoder reliability among those mentioned (p. 249). Neuendorf (2002) writes that Krippendorff’s alpha statistic “takes into account chance agreement and, in addition, the magnitude of the misses [between coders], adjusting for whether the variable is measured as nominal, ordinal, interval, or ratio” (p. 249). Calculating Krippendorff’s alpha statistic was completed using IBM’s SPSS (version 27) statistical software and the Krippendorff alpha macro (kalpha.sps) for SPSS as the software on its own does not have the ability to calculate the Krippendorff alpha statistic without it.

Analyses were calculated four separate times using the Krippendorff alpha macro, once for each research question variable, based on the Proctor et al. (2011) implementation outcomes (see Table 2 below).

**Table 2***Krippendorff Alpha ( $\alpha$ ) Intercoder Reliability Coefficient Results for DCA Coding Scheme*

Proximal Implementation Outcome Variable	<i>n</i>	$\alpha$
Appropriateness of fit (RQ1)	14	.7033
Feasibility of fit (RQ2)	49	.7662
Adoption (RQ3)	50	.8089
Acceptability (RQ4)	40	.8181

*Note.* Analysis resulted from the separate coding of 58 total documents, 49 randomly selected ORPP-related emails and 9 randomly selected ORPP-related work documents by two coders.

Based on the previously discussed guidelines set forth by Neuendorf (2002) and Krippendorff (2013), these intercoder reliability coefficient results were acceptable enough to move forward with the full Directed Content Analysis (DCA), using the current, and final, version of this projects coding scheme. These results show good, but not great intercoder agreement, with two of the four analyses showing a reliability coefficient above Krippendorff's (2013) benchmark of .80 as acceptable to all, and the other two being well above the .60 mentioned as being acceptable in most situations. While tentative conclusions from the DCA, according to Krippendorff (2013), may be drawn using the current version of the coding scheme based on these results, potential limitations of this overall study, including these analytic results, will be discussed later in the limitations section.

**Frequency Analysis.** Simple frequency analysis of the final results of the directed content analysis (DCA) of the randomly selected ORPP-related emails and work documents was

completed once an acceptable level of intercoder reliability was established and the work of hand-coding the documents was completed. Frequency distributions were determined through general descriptive statistical analysis using the IBM's SPSS statistical software version 27. According to Mayring (2014) frequency distribution procedures (one of the most common types of analyses that are used with content analysis) are used to, "count certain elements in the material and compare them in their frequency with the occurrence of other elements" (p. 22). Determining the frequency of how the three different ORPP process outputs (knowledge transfer, problem of practice identification and addressing, and improvement capacity building) were employed during the early phases of ORPP implementation helped to shed light on how successful, if at all, efforts were in establishing its improvement efforts with partner schools.

#### ***Descriptive Statistics of the ORPP Teacher PD Survey Data***

Analysis of the ORPP teacher PD survey data were completed in the form of general descriptive statistics, analyzing the quantitative data of an ORPP-delivered teacher survey to help shed light on the perceived impact ORPP-led professional development (PD) efforts had on overall improvements in classroom instruction. Quantitative analysis of survey data provides a detailed look at teacher perceptions of ORPP-supported PD across the four partner high schools. Teacher PD, being one of the main drivers for improving teacher instruction within the ORPP logic model, will provide insight on; (a) school improvement capacity building, (b) leadership distribution in areas of school improvement, and (c) the use of research (e.g. RBPs) to develop and improve educational service and classroom instructional effectiveness.

Descriptive statistical analysis helped to describe and summarize teacher survey data in a meaningful way that indicated patterns that emerged from the data within individual schools, and across the larger network of the ORPP-partnership, particularly when integrated with other

mixed data collected and analyzed for this project. Statistical analysis included frequency distributions of the different survey data, as well as measures of central tendency (e.g. mean) and spread (e.g. standard deviation). Tabulated and graphical representations are included to aid in the commentary of what the statistical analysis say about how teachers perceive the work of ORPP, overall teacher PD and how they perceive those efforts impacting their classroom instruction. Analysis provided important insight into the evaluation of overall processes of ORPP implementation.

Fall 2019 teacher survey data included survey results from 120 total teachers across the four schools, approximating 72.3% of the total teaching staff. Of the 120 total teachers who completed the survey, 20 were from CHS (95.2% completion staff wide), 41 were from RHS (95.3% completion staff wide), 34 were from SHS (79.1% completion staff wide) and 25 were from JHS (42.4% completion staff wide). Descriptive statistical analysis was used to analyze teacher PD survey data. SPSS statistical software, version 27, was used. This analysis helped to answer the second research question, shedding light on the perceived impact ORPP-led professional development efforts had on the teacher's efforts to improve their classroom instruction, how those same teachers perceived the support school leadership offered for the PD.

### ***Thematic Analysis of Educator and Educational Leader Interviews***

Nine total interviews took place virtually using the Zoom web conferencing software from December 14<sup>th</sup>, 2021 to March 10<sup>th</sup>, 2022. IRB consent forms were signed by interviewees prior to the interviews taking place, and all interviewees assented to having the Zoom-based interviews recorded. The University of Oregon's Zoom web conference platform allows recorded sessions to have automatic transcripts produced. These transcripts were in addition to separate notes I took for each interview. All interview documents were made anonymous from the outset.



Following guidance from Braun and Clarke (2006), this researcher followed their six steps for thematic analysis of the interview documentation data, which included an iterative process of: (a) familiarizing oneself with the data, (b) generating initial codes based on that familiarization and revising codes when appropriate, (c) searching for themes within those codes, (d) reviewing those themes, (e) defining and naming themes, and (f) producing the report, which in this projects case is included in the final cross-case analysis. Braun and Clarke (2006) define thematic analysis as, “a method for identifying, analyzing and reporting patterns (themes) within data... [which] minimally organizes and describes [my] data set in (rich) detail” (p. 79). For this project, the detailed steps of Braun and Clarke (2006) were followed, by using a Microsoft Excel Spreadsheet to note down initial ideas, trends and potential coding interests. This process then led to collating codes into potential thematic areas and a process of refining those themes while continuing to become more and more familiar with the data by reading and re-reading through the collected interview documentation.

## CHAPTER V

### RESULTS

The first part of this results section summarizes quantitative results and then moves into to the second phase of the study which provides a rich descriptive case study of each school and the overall network by describing the completed cross case and thematic analyses. This two-phase process is meant to help first understand the part the initial quantitative analyses play in shedding light on ORPP implementation and how different partner schools were involved in it. In this way, the convergent mixed method design brings together both quantitative and qualitative processes which helped to find a deeper understanding of early ORPP implementation.

#### **Directed Content Analysis**

Frequency analysis of 495 randomly selected emails and 87 randomly selected work documents (n = 582) resulted in a total of 165 coded email instances and 61 coded ORPP work document instances showing an occurrence of the co-existence or integration of both the proximal implementation outcomes and the ORPP process outputs being looked for. Of the 165 coded email instances, seven of them came from emails where other proximal implementation outcome variables were also coded. This means that out of the 495 randomly selected emails, only 158 (31.9%) of them were identified as including any content related to the proximal implementation outcomes being examined for this project. Of those 165 coded email instances (across the 158 emails identified), 43 (26.1%) indicated they were related to the appropriateness implementation outcome (RQ1), 55 (33.3%) were related to the feasibility implementation outcome (RQ2), 28 (17%) were related to the adoption implementation outcome (RQ3), and 39 (23.6%) were related to the acceptability implementation outcome (RQ4). See Table 3 below for more detail on the breakdown of those proximal implementation outcomes and how they integrated with the ORPP

process output goals.

**Table 3**

*DCA Coded Email Frequency Analysis for the Integration of Proximal Implementation Outcomes and ORPP Process Outputs*

Integrated Outcome Variables	Frequency	Percent
Appropriateness of fit (RQ1)		
Transfer of Knowledge (RQ1-1)	5	11.6%
Identification and addressing Problems of Practice (RQ1-2)	16	37.2%
Increasing School Improvement Capacity (RQ1-3)	34	79.1%
Feasibility of fit (RQ2)		
Transfer of Knowledge (RQ2-1)	5	9.1%
Identification and addressing Problems of Practice (RQ2-2)	14	25.5%
Increasing School Improvement Capacity (RQ2-3)	49	89.1%
Adoption (RQ3)		
Transfer of Knowledge (RQ3-1)	3	10.7%
Identification and addressing Problems of Practice (RQ3-2)	9	32.1%
Increasing School Improvement Capacity (RQ3-3)	22	78.6%
Acceptability (RQ4)		
Transfer of Knowledge (RQ4-1)	0	0.0%
Identification and addressing Problems of Practice (RQ4-2)	7	17.9%
Increasing School Improvement Capacity (RQ4-3)	33	84.6%

*Note.* Cumulative percentages for Proximal Implementation Outcomes were sometimes above 100% as single emails were sometimes coded with multiple ORPP process output codes when appropriate.

Of the 87 randomly selected ORPP-related work documents, 61 (70.1%) of them were

identified as including any content related to the proximal implementation outcomes being examined for this project. Of those 61 coded documents, 11 (18.3%) indicated they were related to the appropriateness implementation outcome (RQ1), 37 (61.7%) were related to the feasibility implementation outcome (RQ2), 9 (15.0%) were related to the adoption implementation outcome (RQ3), and 3 (5.0%) were related to the acceptability implementation outcome (RQ4). See Table 4 below for more detail on the breakdown of those proximal implementation outcomes and how they integrated with the ORPP process output goals.

**Table 4**

*DCA Coded ORPP Work Document Frequency Analysis for the Integration of Proximal Implementation Outcomes and ORPP Process Outputs*

Integrated Outcome Variables	Frequency	Percent
Appropriateness of fit (RQ1)		
Transfer of Knowledge (RQ1-1)	4	36.4%
Identification and addressing Problems of Practice (RQ1-2)	7	63.6%
Increasing School Improvement Capacity (RQ1-3)	5	45.5%
Feasibility of fit (RQ2)		
Transfer of Knowledge (RQ2-1)	4	10.8%
Identification and addressing Problems of Practice (RQ2-2)	16	43.2%
Increasing School Improvement Capacity (RQ2-3)	22	59.5%
Adoption (RQ3)		
Transfer of Knowledge (RQ3-1)	2	22.2%
Identification and addressing Problems of Practice (RQ3-2)	5	55.6%
Increasing School Improvement Capacity (RQ3-3)	4	44.4%

#### Acceptability (RQ4)

Transfer of Knowledge (RQ4-1)	0	0.0%
Identification and addressing Problems of Practice (RQ4-2)	0	0.0%
Increasing School Improvement Capacity (RQ4-3)	3	100.0%

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*Note.* Cumulative percentages for Proximal Implementation Outcomes were sometimes above 100% as single work documents were sometimes coded with multiple ORPP process output codes when appropriate.

#### **Descriptive Statistics of the ORPP Teacher PD Survey Data**

Descriptive statistical analysis, including frequency distributions and measures of central tendency and spread, was completed for ORPP-supported teacher professional development survey results (n = 120). Of the total respondents there were 20 CHS teachers, 41 RHS teachers, 34 SHS teachers and 25 JHS teachers. Of the 43 total questions included in the survey (see Appendix B for the complete survey), tabulated representations for 15 of those questions are included here, as they are the most applicable in helping to shed light on overall early implementation of ORPP, particularly helping to address research questions three and four because teaching staff perception on their general satisfaction of ORPP-supported PD, one of the main drivers of the model, helps to provide insight into the schools overall adoption and acceptability of the partnership as a whole. The ORPP model, which went through at least 15 separate revisions over time, is the documentation process that Lead Teachers worked through with the rest of the ORPP team in support, to collect school improvement-related data, help determine Problems of Practice, and create an improvement plan through professional development and other systems improvements. This model included a continuous improvement cycle that helped to monitor those improvement efforts once started. To see draft version 3.8 of

the ORPP Improvement Model ('ORPP model') that was being used during the 2018-2019 school year, see Appendix G.

**Question 1: How many years have you been teaching?** This first question of the ORPP Teacher PD Survey Data (PD Survey) inquired about the total number of years each participant has taught overall, whether in the current partner school or another location. Choices were 1-2 years (option 1), 3-5 years (option 2), 6-10 years (option 3) and 11+ years (option 4). See Table 5 below for a breakdown of overall teaching experience by school. What is apparent from the survey data for Question 1 is that CHS had a much younger and less experienced teaching staff, with 50% having taught for five years or less, while other schools like RHS had a much more veteran experienced teaching staff, with less than 15% of their staff indicating they had been teaching for five years or less. The teaching experience factor is an important consideration to study when examining the uptake and acceptance of professional development. It has been long argued that many veteran teachers are more resistant to change compared to newer, less experienced, teachers because of factors such as the frequency they have been let down after they have invested time and energy into failed PD and related improvement efforts and skepticism in new PD content that has been recycled and changed numerous times previously (Hargreaves, 2005; Huberman, 1988; Marks, 2004). The level of experience between partner schools, and the potential challenges of implementing PD with more veteran educators who may be more resistant to change, needs to be considered when thinking about both the adoption and acceptability of the ORPP model.

**Table 5***Frequencies of Partner High School Overall Staff Teaching Experience*

School Site	N	1-2 Years	3-5 Years	6-10 Years	11+ Years
Overall Years of Teaching Experience					
All schools combined	120	10.8%	14.2%	17.5%	57.5%
CHS	20	25.0%	25.0%	10.0%	40.0%
RHS	41	7.3%	7.3%	17.1%	68.3%
SHS	34	5.9%	11.8%	23.5%	58.8%
JHS	25	12.0%	20.0%	16.0%	52.0%

*Note.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Question 2: How many years have you been teaching at your current school?** This second question of the ORPP Teacher PD Survey Data (PD Survey) inquired about the total number of years each participant has been teaching at their *current ORPP-partner high school*. Choices were the same as the previous question 1; 1-2 years (option 1), 3-5 years (option 2), 6-10 years (option 3) and 11+ years (option 4). See Table 6 below for a breakdown of overall teaching experience by school. Similar to the results previously detailed for Question 1, Question 2 focused on teaching experience, though this question was specifically asking how long they had been teaching at their current school. Results from both CHS and JHS indicate, not only a relatively inexperienced staff (looking back to Table 5), but also in the case of time at their current school, a teaching staff relatively new to the school itself. In my own personal experience (having taught for approximately 12 years in three different schools and one year as a full-time

substitute teacher in numerous schools) this likely means those teachers are still coming to understand the nuances of school politics, leadership style, and the history of PD and improvement efforts among many other dynamics. Both CHS and JHS results indicated that 60% of their teaching staff had been working at the school for five years or less. In the case of CHS 35% of teachers had been there for two years or less, and 36% of JHS teachers had been there for two years or less. This could be an indicator that a good portion of the teaching staff at both of those schools would be more receptive to the ORPP-supported PD and less resistant to change as they may have not been as cynical as the more veteran teachers might have been.

In the case of both RHS and SHS, they both had considerably more veteran staff not only in total years teaching, but also in teaching at their current respective schools. As indicated in Table 6 below, 68.3% of RHS teachers had been at the school for eleven or more years. Similarly, 58.8% of SHS teachers had been there for eleven or more years, and 23.5% for between six and eleven years. PD is about change, about improving teaching practice. If there were teachers resistant to those efforts in the ORPP-partner schools, they were most likely found at RHS and SHS.

**Table 6**

*Frequencies of Partner Staff Teaching Experience at their Current High School*

School Site	N	1-2 Years	3-5 Years	6-10 Years	11+ Years
<b>Overall Years of Teaching Experience</b>					
All schools combined	120	24.2%	25.8%	17.5%	32.5%
CHS	20	35.0%	25.0%	10.0%	30.0%
RHS	41	22.0%	24.4%	14.6%	39.0%



SHS	34	11.8%	29.4%	23.5%	35.3%
JHS	25	36.0%	24.0%	20.0%	20.0%

*Note.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Question 3: This school year, how many topics did your professional development focus on?** This third question of the ORPP Teacher PD Survey Data (PD Survey) asked participating teachers about their perceptions of the total number of PD topics that had been covered up to that point in the school year. Choices ranged from one topic up through to 6 or more topics (1, 2, 3, 4, 5, 6+). See Table 7 below for a breakdown of overall teaching experience by school.

One of the primary aims of professional development efforts under the ORPP model was that each partner school was to keep things straightforward and streamlined, focusing on up to 2-3 areas total. As stated in page eight of version 1.7 of the ORPP Improvement Model from the fall of 2018 (See Appendix F for a similar ORPP Improvement Model), “Strong leadership promotes and participates in whole-school PD with clear achievable goals in only up to 2-3 areas of improvement in total.” This comes from evidence that indicates teacher professional development is more successful when it comes with a higher level of intensity or dosage (Yoon et al., 2007; Kennedy, 2016). In all schools, time for teacher professional development is limited, it is finite. Working with Lead Teacher in partner schools to limit the number of PD topics they were focused on would allow for more time to be spent on them, more time would ideally lead to more penetration and adoption. As detailed in Table 7 below, teacher perceptions of the total PD topics they encountered shows some success in limiting the total number, with JHS being the

outlier with no teachers indicating one topic, and a surprising 28.0% indicating they had been through six or more total PD topics by the fall.

**Table 7**

*Total Perceived PD Topics at That Point in The School Year*

School Site	1 Topic	2 Topics	3 Topics	4 Topics	5 Topics	6+ Topics	<i>M</i>	<i>SD</i>
Overall Years of Teaching Experience								
All schools combined	7.50%	34.2%	34.2%	9.20%	3.3%	11.7%	3.02	1.39
CHS	10.0%	40.0%	35.0%	0.0%	5.0%	10.0%	2.80	1.40
RHS	2.4%	39.0%	39.0%	7.30%	2.4%	9.8%	2.98	1.26
SHS	17.6%	35.3%	32.4%	11.8%	0.0%	2.9%	2.50	1.11
JHS	0.0%	20.0%	28.0%	16.0%	8.0%	28.0%	3.96	1.54

*Note.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Question 4: This school year, what was the primary professional development theme or topic?** This fourth question of the ORPP Teacher PD Survey Data asked participating teachers about the actual topics of PD content up to that point in the school year. Question 4 was an open-ended response question where participants could type in anything they wanted. See Table 8 below for a cumulative total of teacher perceived totals of PD topics by school. Cottonwood High School (CHS) participants (20) included the four following topics: School engagement, project-based learning (aka PBL), Google Apps for Education (aka educational

technology and Google Apps), and student engagement (aka student involvement). It should be noted, that although these four topics (and their derivatives) comprised all of the included answers. Of the total, 15% of CHS respondents selected either 5 total PD topics or 6+ total PD topics thus far in that school year. Of those four topics, school engagement was brought up 4 times (16% of total), project-based learning was brought up 2 times (8% of total), Google Apps for Education was mentioned 6 times (24%) and student engagement was mentioned 13 times (52%).

Redwood High School (RHS) participants (41) included the four following topics: Conscious Discipline (aka student engagement and building relationships with students), data teams, special education topics, growth mindset, or in one case an educator put “unknown.” Conscious Discipline is a commercial curriculum that is aimed at improving school outcomes through improving teacher and staff to student relationships and increasing staff knowledge about Social Emotional Learning (SEL; Anderson, Weimer & Fuhs, 2020). Across the district where RHS is located, the Conscious Discipline curriculum was adopted just prior to ORPP starting its partnership work with the school. This important detail will be examined in more depth later. Similar to CHS analysis for Question 4, RHS also had a number of respondents (12.2%) choose five or six total PD topics at that point in the school year, though only four total topics were mentioned in the open-ended response. Of those mentioned, Conscious Discipline (CD) was mentioned 39 times (79.6%), data teams were mentioned 7 times (14.3%), special education topics were mentioned one time (2.0%) and growth mindset was mentioned 1 time (2.0%). One additional respondent answered question 4 by stating “Unknown.”

Spruce High School (SHS) participants (34) included six topic areas: Creating and implementing topic-based Professional Learning Communities (aka PLCs, setting up

Professional Learning Communities, working in PLCs, etc.), Special Education (aka SPED and SPED graduation rates), Individualized Education Plans (IEPs) and 504 accommodations, student learning development and common assessments (curriculum planning, student learning objectives, shared assessments, effective assessments, etc.), proficiency grading, and AVID strategies. Briefly, IEPs are plans for students who have been diagnosed with one of thirteen disabilities as determined by federal IDEA guidance (Blackwell & Rossetti, 2014). 504 accommodations cover a much larger range of disabilities and are covered under federal civil rights protections (Cortiella, 2005). AVID (Advancement Via Individual Determination) is a commercial curriculum that schools can adopt, which aims to help close their opportunity gaps by creating more student-centered equitable approaches across the school's curriculum (Bernhardt, 2013). Out of 34 respondents, PLC implementation was mentioned 22 times (53.7% of all mentions), SPED was mentioned 7 times (17.1% of mentions), IEP and 504 accommodations were mentioned 2 times (4.9%), shared curriculum development and common assessments were mentioned 8 times (19.5%), proficiency grading was mentioned 1 time (2.5%) and AVID training was mentioned 1 time (2.5%).

Juniper High School (JHS) participants (25) included 9 distinct PD topics, including an integrated "unknown" topic as so many respondents' answers included explanations that they were unsure what the actual PD topics were. Topics included school climate (aka school goals) mentioned 6 times (18.8%), instructional practices (aka curriculum planning) mentioned 3 times (9.4%), PLCs mentioned 6 times (18.8%), student engagement mentioned 2 times (6.3%), circles (unknown meaning) mentioned 1 time (3.1%), restorative justice practices (aka equity related topics) mentioned 4 times (12.5%), checks for understanding (could be related to instructional practices, but not clear) mentioned 2 times (6.3%), students passing core classes mentioned 1

time (3.1%) and unknown (aka “I do not think we’ve had a primary topic all year,” “all over the place,” “no one theme,” and “not sure there has been any PD themes at all this year”) mentioned most frequently at 7 times (21.9% of all mentions).

**Table 8**

*Total Perceived PD Topics Count by Fall 2019 Broken Down by Partner School*

Number of PD Topics Identified	CHS	RHS	SHS	JHS	Total
One Topic	2	1	6	0	9
Two Topics	8	16	12	5	41
Three Topics	7	16	11	7	41
Four Topics	0	3	4	4	11
Five Topics	1	1	0	2	4
Six or More Topics	2	4	1	7	14

*Note.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Questions 7.1, 7.2, and 7.4: Regarding the professional development this year, please mark your most accurate feelings regarding the following statements: (7.1) I liked the professional development, (7.2) My time was well spent, (7.4) It was useful.** These three questions, combined into one overall question section in the teacher survey, asked about the teachers’ perceptions of the PD they took part in, and their general feelings about its favorability and use. All components of question 7 used Likert-style choices that included; Strongly agree (1), agree (2), somewhat disagree (3) and strongly disagree (4). Table 9 below includes frequency analysis of respondent answers by school. There are a number of noticeable figures

when Table 9 is examined, some of which correspond to previously discussed details regarding the teaching experience of partner school staff and the number of perceived topics contained within PD up through in the fall of 2019.

CHS, the school with one of the least experienced teaching staffs had one of the most positive collective responses when asked if they liked the PD. Additionally, survey results indicated that CHS staff also felt their time was the most well spent (75% strongly agreed or agreed) and felt that the PD was useful to them (90% strongly agreed or agreed). This result is likely due to a number of factors, but the lack of teaching experience and not having the repetitive experience of going through many years of PD were likely factors. Additionally, the approach CHS Lead Teacher #1 took in creating PLCs where teachers could choose student-engagement topics that they preferred was also a likely contributor to the positive ratings.

SHS had poor ratings across the board in all three questions related to their perceived favorability of the ORPP-supported PD. They had, by far, the highest rating of strongly disagree (29.4%) when asked if they liked the PD. They had similarly negative responses when asked if their time was well spent and if the PD was useful. There are a number of factors that likely led to this result, but having a more veteran teaching staff and having a relatively high number of perceived PD topics early in the 2019 school year were possible influences. A number of other factors relating to SHS leadership, a lack of clear vision and goals, and district interruptions regarding PD topics will also be detailed within this study.

The overall poor results across all four partner schools regarding the perceptions of favorability regarding ORPP-supported PD indicate an elevated possibility that partner schools did not have a high degree of uptake of the PD content, leading to low adoption and ultimately a low level of partner satisfaction. This will be discussed further in upcoming sections.

**Table 9***Teachers Perceived Favorability and Use of ORPP-Supported Professional Development*

School Site	N	Strongly Agree	Agree	Somewhat Disagree	Strongly Disagree	<i>M</i>	<i>SD</i>
<b>7.1 I liked the PD</b>							
All schools combined	120	5.0%	55.0%	26.7%	13.5%	2.48	0.79
CHS	20	25.0%	55.0%	20.0%	0.0%	1.95	0.67
RHS	41	0.0%	58.5%	29.3%	12.2%	2.54	0.71
SHS	34	0.0%	47.1%	23.5%	29.4%	2.82	0.87
JHS	25	4.0%	60.0%	32.0%	4.0%	2.36	0.64
<b>7.2 My time was well spent</b>							
All schools combined	120	4.2%	46.7%	32.5%	16.7%	2.62	0.81
CHS	20	10.0%	65.0%	25.0%	0.0%	2.15	0.59
RHS	41	0.0%	48.8%	36.6%	14.6%	2.66	0.73
SHS	34	2.9%	38.2%	29.4%	29.4%	2.85	0.89
JHS	25	8.0%	40.0%	36.0%	16.0%	2.60	0.87
<b>7.4 [The PD] was useful</b>							
All schools combined	120	5.8%	55.0%	29.2%	10.0%	2.43	0.75
CHS	20	25.0%	65.0%	10.0%	0.0%	1.85	0.59
RHS	41	0.0%	58.5%	29.3%	12.2%	2.54	0.71
SHS	34	2.9%	41.2%	38.2%	17.6%	2.71	0.80
JHS	25	4.0%	60.0%	32.0%	4.0%	2.36	0.64

*Notes.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Question 7.5: Regarding the professional development this year, please mark your most accurate feelings regarding the following statements. - The leader was knowledgeable and helpful.** Question 7.5, while originally a sub-component of Question 7 with the others previously discussed (7.1, 7.2, and 7.4), is displayed separately as the question deals with the PD leader themselves, which in almost all cases was the ORPP Lead Teacher themselves, or other educators delivering PD as supported and led by the ORPP Lead Teacher. Question 7.5, like other question 7 sub-parts, used a Likert-style choice that included; Strongly agree (1), agree (2), somewhat disagree (3) and strongly disagree (4). Table 10 below includes an overall breakdown of respondent answers, and answers broken down by school. Looking at the results from Question 7.5, only one stands out to this researcher beyond the others. It is the comparatively small number of SHS teachers who strongly agreed (8.8%) that the PD Leader was knowledgeable and helpful and the comparatively high degree that somewhat disagreed (23.5%). There are a number of factors that likely led to this result, but some are probably the same discussed throughout this study; how vague ORPP goals were addressed by SHS Principal #1, not having Lead Teacher #1 work with staff at all leading to almost no knowledge of the ORPP model by them, the switch from Lead Teacher #1 (myself) to Lead Teacher #2 just prior to this survey being taken, and the changing targets when it came to SHS and district vision and goals. This result for SHS, along with those previously detailed certainly leads to an elevated



possibility that staff collectively did not have a high degree of uptake of the PD content, leading to low adoption and ultimately a low level of partner satisfaction.

**Table 10**

*Teachers Perception of PD Leaders Knowledge and Helpfulness*

School Site	n	Strongly Agree	Agree	Somewhat Disagree	Strongly Disagree	M	SD
All schools combined	120	20.8%	65.0%	10.8%	3.3%	1.97	0.67
CHS	20	45.0%	55.0%	0.0%	0.0%	1.55	0.51
RHS	41	19.5%	68.3%	9.8%	2.4%	1.95	0.63
SHS	34	8.8%	61.8%	23.5%	5.9%	2.26	0.71
JHS	25	20.0%	72.0%	4.0%	4.0%	1.92	0.64

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**Questions 13.1 and 13.2: Rate how well the school staff supported professional development in your building during the past school year: (13.1) To what extent did the school administrator(s) support this professional development? (13.2) To what extent did the teachers in your school support this professional development?** Both questions 13.1 and 13.2 used a Likert-style choice that included three options; Strongly supported (1), moderately supported (2), weakly supported (3). Table 11 below includes an overall breakdown of respondent answers, and answers broken down by school. There are several stand out results in Table 11 below from across the two different questions. RHS had a considerably high number of teachers who perceived that their administration (including RHS Principal #1) strongly supported the PD, which was essentially the Conscious Discipline curriculum. As previously detailed, this

was a direct top-down requirement from the district office that all schools K through 12 adopt this curriculum. This is an indicator that, at least on the surface, RHS Principal #1 and their two Assistant Principals were in support of this curriculum, at least at this point in time. SHS also had a stand out result in the number of teachers who perceived their administration (including SHS Principal #1) weakly supported PD. It is impossible to know the exact reason behind this perception, but it is possible the messaging conveyed by Principal #1 was vague, weakly supportive or largely absent. It does hint at both weak adoption of the ORPP model and a lack of acceptability of it on their part.

When asked about their perceptions on whole staff support of ORPP-supported PD, there was a high degree of those who believed the staff weakly supported it. This is a disappointing result considering PD delivery was one of the main efforts to deliver the ORPP model at this point in time. RHS staff were likely not happy with the CD curriculum. If continuing survey results could have been collected, this researcher believes the number of teachers weakly supporting the PD would go up considerably. SHS had a vague shifting role out to their PD, where the teaching staff were really disconnected from ORPP leading up to the start of 2019. JHS ORPP-supported PD was being steered by Lead Teacher #1, who had no real background or expertise in delivering teacher professional development. Overall, disappointing, but not surprising given all of this. Again, this leads the researcher to believe that across the board, all partner schools had a low level of both adoption and acceptability.

**Table 11**

*Teachers Perception of Administration and Teaching Staff Support for ORPP-Supported PD*

School Site	N	Strongly Supported	Moderately Supported	Weakly Supported	M	SD

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13.1 Administrations support of						
PD						
All schools combined	120	55.0%	30.0%	15.0%	1.60	0.74
CHS	20	55.0%	35.0%	10.0%	1.55	0.69
RHS	41	73.2%	22.0%	4.9%	1.32	0.57
SHS	34	41.2%	29.4%	29.4%	1.88	0.84
JHS	25	44.0%	40.0%	16.0%	1.72	0.74
13.2 Teaching staff support of						
PD						
All schools combined	120	20.0%	56.7%	23.3%	2.03	0.66
CHS	20	25.0%	65.0%	10.0%	1.85	0.59
RHS	41	22.0%	51.2%	26.8%	2.05	0.71
SHS	34	8.8%	70.6%	20.6%	2.12	0.54
JHS	25	28.0%	40.0%	32.0%	2.04	0.79

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*Notes.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Questions 18.1, 18.2 and 18.3: The Professional Development was: (18.1) Consistent with your goals for professional development, (18.2) Followed with activities that built upon what was learned, and (18.3) Aligned with state or district standards and curriculum frameworks.** All three questions (18.1, 18.2 and 18.3) used a Likert-style choice that included four options; Very much (1), moderately (2), weakly (3) or not at all (4). Table 12 below includes an overall breakdown of respondent answers, and answers broken down by school.

Again, ORPP-supported PD at CHS stands out here as having higher perceived value by teachers regarding how it aligned with their own PD goals, if it was followed up with additional learning activities and if it was aligned with district (and state) standards and curricular goals. This is likely due to numerous factors, but the unseasoned nature of the CHS teaching staff, the fact that CHS staff could choose from several different engagement related PD topics, and the long experience of the veteran CHS Lead Teacher #1 in providing whole staff PD prior to ORPP involvement all likely play important roles in this result.

It was also unfortunate to see so many teachers respond that they perceived little to no PD follow up with additional responsibilities. In the cases of both SHS and JHS, it helps shed light on how ill prepared those lead teachers were to do so. That perceived lack of preparation and follow up primarily falls on the shoulders of ORPP staff and its improvement model, as it was an absolute priority to make sure PD was regularly followed up upon and built up from previous sessions. As with other teacher survey results, this suggests both poor adoption and poor acceptability from the school partners as a whole.

**Table 12**

*Teachers Perception of PD Alignment with Standards, Curriculum and Own Development Goals*

School Site	N	Very much	Moderately	Weakly	Not at all	M	SD
<b>18.1 Consistent with own PD</b>							
goals							
All schools combined	120	21.7%	50.8%	20.0%	7.5%	2.13	0.84
CHS	20	45.0%	50.0%	5.0%	0.0%	1.60	0.60
RHS	41	24.4%	51.2%	14.6%	9.8%	2.10	0.89

SHS	34	11.8%	50.0%	29.4%	8.8%	2.35	0.81
JHS	25	12.0%	52.0%	28.0%	8.0%	2.32	0.80
18.2 PD followed with learning activities							
All schools combined	120	19.2%	45.0%	25.0%	10.8%	2.28	0.90
CHS	20	45.0%	40.0%	15.0%	0.0%	1.70	0.73
RHS	41	22.0%	56.1%	14.6%	7.3%	2.07	0.82
SHS	34	5.9%	47.1%	26.5%	20.6%	2.62	0.89
JHS	25	12.0%	28.0%	48.0%	12.0%	2.60	0.87
18.3 PD aligned with state / district standards and curriculum frameworks							
All schools combined	120	27.5%	45.0%	19.2%	8.3%	2.08	0.89
CHS	20	45.0%	45.0%	10.0%	0.0%	1.65	0.67
RHS	41	29.3%	41.5%	22.0%	7.3%	2.07	0.91
SHS	34	20.6%	50.0%	14.7%	14.7%	2.24	0.96
JHS	25	20.0%	44.0%	28.0%	8.0%	2.24	0.88

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*Notes.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Question 20: Indicate the degree to which your knowledge and skills were enhanced as a result of the professional development.** Question 20 used a Likert-style choice that included; Strongly enhanced (1), moderately enhanced (2), weakly enhanced (3) and Not at all

enhanced (4). When all combined respondents (n = 120) were asked if they felt their knowledge and skills were enhanced as a result of ORPP-supported PD led by the ORPP lead teacher, only 4.2% said it was strongly enhanced, 52.5% said it was moderately enhanced, 34.2% said it was weakly enhanced and 9.2% said the professional development did not enhance their teaching knowledge or skill at all (M = 2.48, SD = 0.72). Table 13 below includes an overall display of respondent answers broken down by school. To this researcher, this is likely the most disappointing result of the entire teacher survey analysis. The entire goal of the ORPP model and its support of RBP-based PD was to enhance teacher’s knowledge and skill in those specific areas in an effort to improve student outcomes. As previously discussed, properly developed and implemented teacher PD has the capacity to directly improve student outcomes. In addition, quality teaching is one of the most significant influences in improving a student’s academic outcomes (Archibald, Coggshall, & Goe, 2011). Excepting the CHS result (25.5% strongly enhanced and 55.5% moderately enhanced), looking at the overall perceived enhancement and teacher knowledge and skills, at the other partner schools, it is clear that very little adoption of the ORPP-supported PD was adopted into practice.

**Table 13**

*Teachers Perception of How ORPP-Supported Professional Development Enhanced Their Teaching Knowledge and skill*

School Site	n	Strongly Enhanced	Moderately Enhanced	Weakly Enhanced	Not Enhanced at All	M	SD
All schools combined	120	4.2%	52.5%	34.2%	9.2%	2.48	0.72

CHS	20	25.5%	55.5%	15.0%	5.0%	2.00	0.80
RHS	41	0.0%	63.4%	31.7%	4.9%	2.41	0.59
SHS	34	2.9%	35.3%	41.2%	20.6%	2.79	0.81
JHS	25	0.0%	56.0%	40.0%	4.0%	2.48	0.59

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*Notes.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

**Question 34: How much did this year’s professional development affect your teaching practices or work with students?** Question 34 used a Likert-style choice that included; A lot (1), Some (2), A little (3) and Not at all (4). Table 14 below includes an overall display of respondent answers broken down by school. The results to Question 34 are (unfortunately) very similar to the results to Question 20 detailed above. This makes sense because for PD to positively affect one’s teaching practices and work with students, that same teachers’ knowledge and skill have to be enhanced prior to. As was just detailed, except for CHS, partner school teacher’s knowledge and skill were not enhanced. So, again, it is no surprise that their teaching practices and work with students was not affected. Overall, this again highlights the low level of penetration ORPP-supported PD had, and how all of these negative results are repetitively indicating an overall low level of adoption and acceptability. Particular results from both SHS and JHS highlight just how poor the perceived value of ORPP-supported PD was.

**Table 14**

*Teachers Perception of How ORPP-Supported Professional Development Affected Their Teaching Practices or Work with Students*

School Site	n	Affected A Lot	Affected Some	Affected A Little	Not at All Affected	<i>M</i>	<i>SD</i>
All schools combined	120	9.2%	38.3%	40.8%	11.7%	2.55	0.82
CHS	20	30.0%	25.0%	40.0%	5.0%	2.20	0.95
RHS	41	2.4%	41.5%	48.8%	7.3%	2.61	0.67
SHS	34	5.9%	35.3%	32.4%	26.5%	2.79	0.91
JHS	25	8.0%	48.0%	40.0%	4.0%	2.40	0.71

*Notes.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School.

### **Thematic Analysis of Nine Educator and Educational Leader Interviews**

Thematic analysis of the nine interview transcripts, and this researchers' notes taken during each virtual interview, led to a narrowed down list of 17 codes spread across 5 thematic areas that were applicable to this project. Table 15 below details the final revised list of codes and themes used in the thematic analysis of the educator and educational leader interviews.

**Table 15**

*Final List of Codes and Themes Incorporated into the Thematic Analysis of Educator and Educational Leader Interviews on Early ORPP Implementation*

Themes	Codes
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(A) The approach in identifying and recruiting ORPP-partner schools	(1) Existing relationship with university leadership, (2) rural schools, (3) urban schools and (4) schools in specific geographic areas.
(B) Ambiguous goal setting at the start of ORPP	(1) professional development, (2) field research projects, (3) dual credit courses and (4) improving graduation rates.
(C) ORPP work alignment with district vision and mission	(1) Leadership disconnect, (2) alignment of work and (3) existing programs.
(D) Role clarity and connection to school partner administration	(1) Administration disconnect, (2) previously set district goals and (3) PD leader / instructional coaching.
(E) Progress measurement in improvement efforts	(1) Goal confusion, (2) lack of momentum and (3) COVID 19 / Pandemic challenges.

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There were a total of 66 coded transcript items identified across the nine separate interviews; 16 (24.2%) fell under the theme of (A) The approach in identifying and recruiting ORPP-partner schools, 20 (30.3%) fell under the theme of (B) Ambiguous goal setting at the start of ORPP, 15 (22.7%) fell under the theme of (C) ORPP work alignment with district vision and mission, 9 (13.6%) fell under the theme of (D) Role clarity and connection to school partner administration, and 6 (9.0%) fell under the theme of (E) Progress measurement in improvement efforts.

Identified themes derived from the thematic analysis seemed to naturally connect well with the proximal implementation outcomes of Proctor et al. (2011). As you can see in Tables

16.1, 16.2, 16.3, 16.4 and 16.5 below, the semi-structured interviews provided direct first-hand insight into what school partners were feeling in regard to the proximal implementation of the ORPP model. Table 16.1, which addresses the theme of the approach ORPP took in identifying and recruiting partner schools, is directly related to the appropriateness outcome and the perceived fit between what the ORPP model was offering network partners and how partner school needs matched it. Similarly, Table 16.2 addresses the second resulting theme from the Thematic Analysis, ambiguous goal setting at the start of the ORPP. This theme matches the feasibility proximal implementation outcome, which was previously defined as the extent to which the ORPP model could have been successfully enacted and utilized at each partner school. Clearly ambiguous goal setting at the start would not bode well for a successful start in enacting and utilizing the ORPP model. Table 16.3 reports on ORPP work aligning with partner districts visions and missions. This third theme associates with the proximal implementation outcome of adoption. Ideally, ORPP work should be in alignment with broader district vision and mission in order to ensure that the work is thought of positively by district leadership and falls within their expectations of how their schools should align with them. Poorly aligned efforts would not likely be adopted successfully by partner schools because of eventual district interference. Table 16.4 reports on role clarity and ORPP model connection to school partner administration. Similar to the third theme on work alignment with district vision and mission and its connection to the adoption outcome, without clearly defined roles for school partners and a clear connection to school administration, it is unrealistic to expect schools to vigorously adopt the ORPP model. Table 16.5 addresses the fifth and final theme defined during the Thematic Analysis, progress measurement in ORPP model improvement efforts. This theme is directly related to the acceptability outcome, previously defined as the extent to which partner schools perceived

satisfaction of the overall ORPP, and its process outputs. Without measuring progress of the ORPP work itself, it would be very difficult to accurately measure how acceptable the partnership is to school partners.

**Table 16.1**

*Codes and Examples for the Approach in Identifying and Recruiting ORPP-partner Schools*  
*Theme from Semi-Structured Interview Transcript Text*

Identified Code	Total Items Coded	Categories Coded (% of Total)	Sample Coded Transcript Text
(1) Existing relationship with university leadership	6	37.5%	“I had gotten to know [ORPP Director] a bit previously from some other work through [removed], and knew it was [ORPP Director] and about research, so we were on board” (RHS Principal #1, personal communication, February 18, 2022).
(2) Redwood schools	4	25.0%	“I can actually remember my principal’s, like, hey there's this, there's something that's from the [university]. They're looking for a rural Eastern Oregon partner, a high school partner” (RHS Lead Teacher #1, personal communication, December 22, 2021).
(3) Juniper schools	4	25.0%	“You know, [JHS] has always, I think, been a school of interest to folks both inside and outside the school district as you know. It’s an urban school, I remember [the university] being interested in partnering with an urban school with diversity” (Juniper High School Principal #1, personal communication, February 11, 2022).
(4) Schools in specific geographic areas	2	12.5%	“We say okay to a bunch of things, and so, who knows, a ton of things we say Okay, and they don't actually work out. I knew it was [ORPP Director] I knew it was [school district] because it was a spread around the state and we were the [removed] school” (Spruce High School Principal #1, personal communication, January 12, 2022).

*Note.* RHS is the Redwood High School partner and JHS is the Juniper High School Partner.

**Table 16.2**

*Codes and Examples for the Ambiguous Goal Setting at the Start of ORPP Theme from Semi-Structured Interview Transcript Text*

Identified Code	Total Items Coded	Categories Coded (% of Total)	Sample Coded Transcript Text
(1) Professional Development	6	30.0%	“Now the PD part, and again I don't know if that was part of the ORPP or just something that [Lead Teacher #1] came up with the PD part, but it was really effective” (CHS Principal #1, personal communication, March 24, 2022).
(2) Field Research Projects	3	15.0%	“One issue was the field projects, we never really got that, never really got around to that. We would have needed much more direct support to do something like that” (CHS Principal #1, personal communication, March 24, 2022).
(3) Dual Credit Courses	7	35.0%	“So, the whole that whole part about the dual credit thing I just... just dropped it, I never thought about it again. [Lead Teacher #1] would bring it up every now and then, Hey What about this, I would just always say who's paying for it? What classes are they offering? And [they] just said I don't know. It got so, it's just like please just ignore that whole line of thinking, with the dual credit stuff. What even is it?” (CHS Principal #1, personal communication, March 24, 2022).
(4) Improving Graduation Rates	4	20%	“Then graduation rate was another [goal]. We have a really high grad rate, I wasn't sure how any of the goals were going to directly change that, that was, I was kind of unsure on that one” (RHS Lead Teacher #2, personal communication, December 14, 2021).

*Note.* CHS is the Cottonwood High School partner and RHS is the Redwood High School partner.

**Table 16.3**

*Codes and Examples for the ORPP Work Alignment with District Vision and Mission Theme from Semi-Structured Interview Transcript Text*

Identified Code	Total Items Coded	Categories Coded (% of Total)	Sample Coded Transcript Text
(1) Leadership Disconnect	6	40.0%	<p>“[The lead teacher] took [the PD] on and I (Principal) was rarely involved. I’d hear from [them] every once in a while, or see PD in action, but that’s about it” (CHS Principal #1, personal communication, March 24, 2022).</p>
(2) Alignment of Work	2	33.3%	<p>“... and I don't know if this was the way it was intended... but it didn't feel as authentic to me it felt like I had to be the one who forced it. I was looking at data and... kind of drafted a goal and said, is this our goal? Which, you know because I felt like I couldn't get administrative commitment to any goal beyond We just need to get our graduation rate up... Which to me didn't align with anything bigger at [SHS] or with [the school district] messaging coming down which was different” (SHS Lead Teacher #2, personal communication, December 21, 2021).</p>
(3) Existing Programs	7	46.7%	<p>In the district office they would say that we are a Conscious Discipline district... it had already been running in elementary schools for like five years... It had already been decided by the district, that the goal was to then ramp up the Conscious Discipline efforts through middle school and high school, all the way, so the whole entire K-12 spectrum would be trained in that” (RHS Lead Teacher #1, personal communication, December 22, 2021).</p>

*Note.* CHS is the Cottonwood High School partner, SHS is the Spruce High School partner and RHS is the Redwood High School partner.

**Table 16.4***Codes and Examples for the Role Clarity and Connection to School Partner Administration**Theme from Semi-Structured Interview Transcript Text*

Identified Code	Total Items Coded	Categories Coded (% of Total)	Sample Coded Transcript Text
(1) Administration Disconnect	3	33.3%	“When it comes down to it, I don’t care about [the university] or ORPP that much... I just want to know really what [the project] means, kind of boots on the ground, and if it wouldn't have been for Lead Teacher #1, and subsequently Lead Teacher #2, if it would have been the wrong person in that role, this whole thing would not have worked because, because I was only going to support it up to the point where I had someone that could pull [the project work] off in the right way” (CHS Principal #1, personal communication, March 24, 2022).
(2) Previously Set District Goals	4	44.4%	“Both through my previous experience as the data coordinator, which was something that the district that summer just piloted you know, a year or so prior to that saying all schools are going to have a data coordinator” (SHS Lead Teacher #2, personal communication, December 21, 2021).
(3) PD Leader / Instructional Coaching	2	22.2%	“... working with the university to design a playbook that would help guide our school into what we needed to work on with our staff. I feel like I thought it had to be about PD, but thinking about it maybe that’s just what I wanted to hear and pushed in that direction because I was excited about it” (CHS Lead Teacher #1, personal communication, March 10, 2022).

*Note.* CHS is the Cottonwood High School partner and SHS is the Spruce High School partner.

**Table 16.5***Codes and Examples for the Progress Measurement in Improvement Efforts Theme from**Semi-Structured Interview Transcript Text*

Identified Code	Total Items Coded	Categories Coded (% of Total)	Sample Coded Transcript Text
(1) Goal Confusion	2	33.3%	<p>“The early buckets of work [the ORPP director] shared did not materialize and at some point, in that school year [the JHS lead teacher] shifted the approach of work. Some of it was useful, but other work was confusing and I did not know how it was going to translate across the entire building... or what my role was as a principal.” (JHS Principal #1, personal communication, February 11, 2022).</p>
(2) Lack of Momentum	1	16.7%	<p>“So it's like okay we've you know, this is the research we've done, we've collected data in our areas... OK and this is the goal and here are some strategies that we're going to try to address and here's how it's going to impact [the teaching staff] or here's how it'll look at the school just kind of giving them opportunities to see it during the process as well. We didn't do a very good job of it I would say. I'd say we just didn't [get to] the point we wanted to and we were doing work it just didn't feel like we were accomplishing much, not moving the needle” (RHS Lead Teacher #2, personal communication, December 14, 2021).</p>
(3) COVID 19 / Pandemic Challenges	3	50.0%	<p>“It felt like we were getting slowly on track, seeing the light at the end of the tunnel until school went online in the spring, after that data teams were basically done” (SHS Lead Teacher #2, personal communication, December 21, 2021).</p>

*Note.* JHS is the Juniper High School partner, RHS is the Redwood High School partner and SHS is the Spruce High School partner.

### *Juniper High School (JHS) Case-Study Synopsis*

As previously mentioned, JHS during the 2017-18 school year had one of the most diverse populations of students in the state, 60 total teachers and approximately 850 students. In that same school year, 73% of students graduated on-time, compared to a statewide 4-year Adjusted Cohort Graduation Rate (ACGR) of 79% for the same year (Oregon Department of Education, n.d.). At the start of the initial 2.5 years of ORPP's early implementation, JHS was approached by the College of Education and ORPP leadership about a potential partnership to improve JHS student outcomes. According to the JHS principal at the time (Juniper High School Principal #1, personal communication, February 11, 2022), they recalled being told that the partnership with ORPP would mimic the agricultural extension model, and "help close the distance between theory and practice and bring research to [JHS] in a mutually supported partnership." The JHS principal did not remember anything more specific about what that supported partnership included other than potential university-based dual credit course offerings, and a "pipeline for students to go to [the university with] opportunities to visit, work with professors, and have more [university] representation on campus" (Juniper High School Principal #1, personal communication, February 11, 2022). JHS had a narrow number of dual credit courses through both a local community college program and a local public 4-year university. However, they were limited in scope and number. JHS also had a rising Career Technical Education (CTE) program with a number of high-tech courses, but these were not dual credit based. The JHS principal remained in this position through the end of the 2018-19 school year.

The JHS principal and ORPP director discussed a teacher they felt would be a good fit for the Lead Teacher role (i.e. the Courtesy Appointment Clinical Professor, or 'CACP'). For clarity in this project, this CACP role will be labeled as Lead Teacher as this was the terminology used



within the partnership at the time. The initially selected Lead Teacher had been teaching part-time at JHS for two years. They received their Oregon teaching credential through a Career Technical Education (CTE) program without a formal degree or credential program. Essentially, they were a very new teacher with little experience (Juniper High School Lead Teacher #1, personal communication, February 18, 2022). The JHS principal felt that this teacher, a teacher of color, would be the ideal person to head up the “[university] pipeline work” as they had a great relationship with students, particularly students of color, and would be the best possible staff member to help facilitate this new work and navigate the relationship between JHS and the university (Juniper High School Principal #1, personal communication, February 11, 2022).

During the interview for this project, the JHS principal recalled some confusion as the ORPP got off the ground and the Lead Teacher began their initial work. “So, after that kind of initial phase of just like talking about it conceptually and identifying... I remember [ORPP Director] shared some graphics with me that kind of spelled out some possible kind of buckets of work that resonated, [including] a bucket of work around professional development” (Juniper High School Principal #1, personal communication, February 11, 2022). Eventually, the initial work at JHS that the Lead Teacher was taking on changed and adapted into Trauma Informed Care practices, and “teacher self-care,” (i.e. teacher wellness) which was loosely based on a previous survey given to the teaching staff prior to the 2017-18 school year and partnership with ORPP. Results of this survey, which this researcher was never able to see, indicated that the majority of JHS staff felt PD around trauma informed care was greatly needed to help work more capably with students who had experienced trauma (Juniper High School Principal #1, personal communication, February 11, 2022).

From the JHS principal's perspective ORPP was a long-term partnership outside the scope of their own day-to-day responsibilities. As the ORPP model was compensating JHS for the lead teacher's salary for time spent working with the ORPP model and it was presented as a 5-year project, the JHS principal felt they had other more pressing items to track on a day to day basis. Once the Lead Teacher role was established, they felt their work with it was done (Juniper High School Principal #1, personal communication, February 11, 2022). In that 2017-2018 school year, the JHS principal was confused about the initial direction the ORPP work was taking once it began. "The early buckets of work [the ORPP director] shared did not materialize and at some point, in that school year [the JHS lead teacher] shifted the approach of work. Some of it was useful, but other work was confusing and I did not know how it was going to translate across the entire building... or what my role was as a principal." (Juniper High School Principal #1, personal communication, February 11, 2022).

JHS survey results substantiate some of this confusion at the start of the ORPP. Only 25 (41.5%) of 60 total JHS teachers took the survey, while completion rates were considerably higher at other partner schools (CHS 100%, RHS 97.6%, SHS 75.5%). At the time the survey was given, 52% of JHS teaching staff had been teaching for more than 11 years, 16% between 6 and 10 years, and 20% for 3 to 5 years. The Lead Teacher fell into the category of 1 to 2 years of experience, along with 12% of the total staff. When given the opportunity to add a written response, JHS staff listed nine total categories for what the primary PD theme or topic had been. Topics listed ranged from school climate and restorative justice practices to "circles," "checks for understanding" and an amalgamated *unknown category* ("I do not think we've had a primary topic all year," "all over the place" and "no one topic") which was the most frequently listed topic category with 21.9% of all written answers.

The ORPP-supported lead teacher did eventually connect with a larger JHS teacher team to assist in PD during the 2018-2019 school years. When the teacher PD survey was given in the fall of 2019, overall results about their perceptions of its value were similar to other partner school results. Of the 25 JHS teachers who took the survey, 4% of respondents strongly agreed and 60% agreed that the PD they had up to that point in the year was useful. Of those same teachers, 20% strongly agreed and 72% agreed that the PD leaders were knowledgeable and helpful. Lastly, 44% felt their administrators strongly supported the PD, 40% felt their administrators moderately supported the PD, 28% of their fellow teachers strongly supported the PD, and 40% of their fellow teachers moderately supported it.

By the start of the 2019-2020 school year the JHS principal had left to another high school in the same district and within two to three months of that school year starting, the JHS Lead Teacher resigned their position. They left to pursue a personal project that was related to some of the student work they had started at JHS (Juniper High School Lead Teacher #1, personal communication, February 18, 2022). With a new JHS administrator, and eventual new Lead Teacher brought on by winter of that school year, they immediately shifted to a district goal of improving 9<sup>th</sup> grade on track outcomes. Lead Teacher #2 had already been assigned this work within the rest of their daily contract time by the new JHS principal, and were not actively teaching in the classroom. Unfortunately, this teacher resigned her position after the scope of this project's timeline, moved out of state, and I was unable to secure an interview with them for their own personal reasons. At this time, it has not been possible to secure an interview with the current JHS principal, whose service falls within the last 9 months of the scope of this project.

**Multicase Theme A - Approach in Identifying and Recruiting ORPP-partner schools.** According to the Stake (2006) cross-case analysis worksheets completed for this part of

this studies investigation, ORPP implementation work with JHS was of “high utility” for analysis. Interview statements with the JHS principal and Lead Teacher about the 2017-2018 and into the 2018-2019 school year at JHS clearly show that there were issues with the initial approach in identifying and recruiting JHS into the partnership. The JHS graduation rate at the time was below the statewide average, and showed room for improvement, however working with the JHS Lead Teacher closely during this time and having personal knowledge of the general culture and climate of the school, there is uncertainty about how ready JHS leadership and staff were for this work. No readiness assessments or related work was undertaken to help determine the school’s investment in and readiness for the scope of work within the ORPP model. As the JHS principal stated in their interview, JHS has “always been a school of interest [from outside organizations] and has had many offers of partnership” (Juniper High School Principal #1, personal communication, February 11, 2022). The JHS lead teacher in their interview for this project described a physical building where many classrooms and office spaces were taken over by outside non-profits and other organizations such Gear Up and other college pathway assistance projects. This made the process for implementing ORPP goals and strategies more cumbersome for the lead teacher who was still relatively new to the school, had not been there in a full-time capacity and who did not have a complete command of the schools nuanced systems and structures that all large urban schools have (Juniper High School Lead Teacher #1, personal communication, February 18, 2022).

**Multicase Theme B – Ambiguous Goal Setting at the Start of ORPP.** According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with JHS was of “high utility” for analysis. As the JHS principal mentioned, there was a very early ORPP goal of recruiting students from partner

high schools to the university. This idea was quickly dispersed with, but not before the first JHS Lead Teacher was selected by their principal into the position. Examination throughout this case study synopsis for JHS intimates at the ambiguous nature the ORPP model got off the ground regarding its work goals and strategies for the Lead Teacher at JHS. It likely did not help matters that the selected Lead Teacher had little teaching experience, and likely little to no experience leading educator-focused professional development. That said, having worked closely with this individual during the entirety of their time as JHS Lead Teacher, they almost certainly would have been a great recruiter of diverse high school graduates to a university in Oregon.

#### **Multicase Theme C – ORPP Work Alignment with District Vision and Mission.**

According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with JHS was of “low utility” for analysis. To be direct, the initial work with the first JHS principal and lead teacher made little discernable progress, and the school district according to interviews with JHS staff and my own recollections did not positively or negatively interfere with any of that work. During the scope of work with the second JHS principal and lead teacher, the ORPP model had been revised properly enough that JHS goals did align with district goals of improving 9<sup>th</sup> grade on track outcomes. Working through the ORPP Improvement Model, data that was collected and analyzed with ORPP support did back up this as a specific focus area for JHS.

#### **Multicase Theme D – Role Clarity and Connection to School Partner**

**Administration.** According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with JHS was of “high utility” for analysis. As previously discussed, and as evidenced by JHS interview details, and teacher PD survey data, there was absolute vagueness for the role of the JHS lead teacher at the outset. They

were recruited into the position primarily as somebody to recruit JHS students to the university, and ended up trying to lead teacher professional development they were unlikely to be successful at. The JHS principal stated that they essentially saw no role for themselves in the partnership, and the lack of clear and constant communication from ORPP staff to partner schools regarding their process output goals as determined by the directed content analysis work, indicates ORPP did not help enough to create a strong connection to the partnership.

**Multicase Theme E – Progress Measurement in Improvement Efforts.** According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with JHS was of “middling utility” for analysis. In the first two and a half years of ORPP implementation ORPP staff, myself included, were regularly developing and revising ORPP as a new research to practice partnership in collaboration with partner schools who were helping to shape it from the ground up offering an educator lens throughout the process. There were ongoing changes, alterations and improvements all aspects of its output during these first two and half years. This process included mistakes and missteps along the way. These constant adjustments added to the confusion of ambiguous goals, and roles etc. which made measuring them a challenge. This experience was not isolated to one partner school, but to all, particularly during the first two and a half years of implementation. Unfortunately, as progress was being made in clarifying the ORPP as a whole and the measurement efforts around it, the spring of 2020 brought school closures and a move to online virtual school, which made planned measurement efforts impossible to implement.

### **Cottonwood High School (CHS) Case-Study Synopsis**

As previously mentioned, CHS during the 2017-18 school defined 68% of their students as white and claimed 20 total teachers and approximately 324 total students. 93% of CHS

students graduated on-time, compared to a statewide 4-year Adjusted Cohort Graduation Rate (ACGR) of 79% for the same year (Oregon Department of Education, n.d.). The CHS principal was candid in his recollections of how CHS was brought into the ORPP. According to the CHS principal, the school district superintendent and ORPP director agreed that CHS would be a good fit, with no real input from CHS leadership (Cottonwood High School Principal #1, personal communication, March 24, 2022). A CHS teacher, who had just left an administrative position in a neighboring district the previous school year was selected as the ORPP Lead Teacher. At the start, the CHS principal was most concerned with how to juggle the ability of having this teacher do the [compensated] ORPP work, while still having the newly minted Lead Teacher continue their full-time teaching duties as an English Language Arts teacher. The principal questioned, “how that was going to look with [the Lead Teachers] schedule because [they] were not going to be able to... get another half time English teacher in here [and he could not] give [them] up because [they] were needed as full time” (Cottonwood High School Principal #1, personal communication, March 24, 2022). The CHS principal remembered that the initial ORPP goals were to focus on dual credit courses for CHS students at the university and teacher professional development (PD). Their initial reactions to that were good and bad. Dual credit courses were already firmly and successfully established at CHS with a local community college, but there was currently no clear system or schedule for more in-depth professional development (Cottonwood High School Principal #1, personal communication, March 24, 2022).

Both the CHS principal and Lead Teacher agreed in their separate interviews that the CHS principal was not an instructional leader regarding teacher and staff PD, and they both acknowledge that reigns of PD leadership were fully given over to the CHS Lead Teacher (Cottonwood High School Principal #1, personal communication, March 24, 2022; (Cottonwood

High School Lead Teacher #1, personal communication, March 10, 2022). According to the CHS principal, “Now the PD part, and again I don't know if that was part of the ORPP or just something that [the CHS Lead Teacher #1] came up with the PD part, but it was really effective. In fact, it's probably one of our best PD... you know thinking back [over] a two-year block of PD... that we've had here in a long time” (Cottonwood High School Principal #1, personal communication, March 24, 2022). Summarizing recollections of the Lead Teacher, CHS focused on a PD plan that allowed teachers to choose between the topics of project-based learning, student engagement strategies, and navigating and implementing Google Docs for Education in their classrooms. These topics were derived from a questionnaire developed by the Lead Teacher and filled out by CHS staff in early 2017-2018 school year PD meetings. From early on they felt frustrated about university dual credit courses never making progress from the ORPP side of the partnership, and eventually just put those goals on pause. PD topics on the questionnaire were derived from staff and administrative recognition that a growing number of CHS students were requesting to transfer to an alternative high school in the district, where work was perceived to be much easier and courses were simply passed asynchronously and independently through an online course platform (Cottonwood High School Lead Teacher #1, personal communication, March 10, 2022). There was some recognition during this time that while the CHS graduation rate was high, some students were feeling disconnected and disengaged from the school as a whole, particularly with class work.

Fall 2019 teacher survey results confirm much of this sentiment. In the fall of 2019, 100% of certified teachers took the teacher PD survey (20 of 20). At the time CHS staff were relatively new to the teaching field compared to the rest of the ORPP partners with 50% having taught for five years or less. That is compared to an overall average of 25% of ORPP-partner



school teachers who had taught for five years or less at the time. By the fall of 2019, 75% of all CHS teachers felt that only 2 or 3 main PD topics had been covered thus far in the school year. The category of student engagement (sometimes labeled student involvement by some teachers), project-based learning, and Google Apps for Education were the only topics listed. When asked if the PD was useful, 25% strongly agreed, 65% agreed, 10% somewhat disagreed and none strongly disagreed. When asked if the PD leader were knowledgeable and helpful, 45% strongly agreed, 55% agreed and nobody disagreed on any level. When teachers were asked if the school administration supported the ORPP-supported PD, 55% thought administration strongly supported it, 35% thought administration moderately supported it, and 10% thought administration weakly supported it.

Work continued in this fashion with the CHS Lead Teacher trying to balance full-time teaching with ORPP work for much of the 2017-18 school year. Eventually, schedules were modified to allow the Lead Teacher to actually have the two-periods of release time that ORPP was financially supporting to continue this work. ORPP staff supported the PD planning with some offer of evidence and research based and informed content related to project-based learning and student engagement. Because of the teacher PD survey timeline disruption and general interruption from the COVID 19 pandemic, early plans in measuring teacher perceptions of this work over time never came to fruition. Both the CHS Lead Teacher and Principal remained in their original positions throughout the scope of this project, ending on May 31, 2020, continuing work in much the same fashion described here. Though beyond the scope of this project, it is worth noting here, that when the original CHS Lead Teacher left the position at the start of the 2020-2021 school year, a CHS administrator took over the Lead Teacher role and immediately

started working on 9<sup>th</sup> grade on track system improvements at the behest of the district office, and the entire PD structure the original Lead Teacher developed was scrapped.

**Multicase Theme A – Approach in Identifying and Recruiting ORPP-partner schools.** According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with CHS was of “high utility” for analysis. At the time CHS was recruited into the ORPP, its four year on-time graduation rate was 93%, which was well above the statewide 4-year Adjusted Cohort Graduation Rate (ACGR) of 79% for the same year (Oregon Department of Education, n.d.). Given this, it is clear what a challenge it was for ORPP to help CHS improve its graduation rate even more considering that this was its primary goal at the time. After interviews were completed with CHS staff, it also became clear that there was very little initial input given at the school level on this new partnership, and most early conversations about it happened at the district level. Given no readiness assessments were completed with any partner schools prior to improvement work starting, it seems to be clear that there were likely more appropriate high school partners that could have joined the ORPP team.

**Multicase Theme B – Ambiguous Goal Setting at the Start of ORPP.** According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with CHS was of “middling utility” for analysis. Given the early ORPP goals were to improve graduation rates with partner schools and that the establishing of university dual credit coursework as one strategy to help improve those graduation rates, it is easy to understand why the CHS Lead Teacher focused primarily on teacher PD alone. The graduation rate was already well above state average, with little room to improve, and dual credit coursework was already firmly in place at CHS who was working with

the local community college for those courses. This created an ambiguous starting point to then set goals, with PD the only option ORPP was offering at the time. Though it appears that the CHS staff perception was positive overall regarding the PD being offered, as was the CHS principal.

#### **Multicase Theme C – ORPP Work Alignment with District Vision and Mission.**

According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with CHS was of “low utility” for analysis. Throughout my interactions in ORPP work during this time there were no discussions of negative impacts from district mandates related to their vision and goal setting processes. Similarly, nothing was mentioned during interviews with the CHS principal or lead teacher.

#### **Multicase Theme D – Role Clarity and Connection to School Partner**

**Administration.** Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with CHS was of “middling utility” for analysis. According to their own accounts in addition to this researchers’ personal recollections, and the principals interview content, the Lead Teacher’s role was relatively clear in regards to being the primary person responsible for school-wide professional development. However, as previously detailed, as CHS had a high graduate rate already established, is really diminished their role in working on separate efforts to improve it. Additionally, they had no real role in getting university dual credit courses up and running within CHS, as ORPP never made real progress in this regard, and they already had established dual credit courses with their local community college.

There was a clear disconnect between the ORPP project itself, including ORPP staff, and the CHS Principal themselves. In one of the previous quotes, the CHS principal mentioned that

they did not even know if PD that the ORPP Lead Teacher was part of the ORPP project itself, even though it was essentially the *only* part of the ORPP implementation structure the Lead Teacher was working on. Given more time with the initial Lead Teacher in their role, the PD system created could have gained more traction, particularly if the connection to the CHS Principal could have been strengthened through improved ORPP program implementation efforts.

**Multicase Theme E – Progress Measurement in Improvement Efforts.** Please see Juniper High School (JHS) Case-Study Synopsis, *Theme E – Progress Measurement in Improvement Efforts* for a response which applies to equally to all ORPP-partner schools in the vast majority of ways.

***Redwood High School (RHS) Case-Study Synopsis***

RHS during the 2017-18 school defined 71% of their students as white and claimed 42 total teachers and approximately 760 total students. 95% of RHS students graduated on-time, compared to a statewide 4-year Adjusted Cohort Graduation Rate (ACGR) of 79% for the same year (Oregon Department of Education, n.d.). Prior to the start of the 2017-2018 school year, the RHS Principal left their position, and a new one was hired. Just before this position change, district officials had approved the ORPP, and so the new RHS Principal came into their new role with ORPP just getting started. Over the summer leading into the new school year, the previous RHS principal had selected the first Lead Teacher (RHS Lead Teacher #1), and so the new RHS Principal also came into this work with that role already filled. According to RHS Lead Teacher #1 the outgoing RHS Principal had no interest in the ORPP project, had only accepted it because of district pressure, and simply handed it off to RHS Lead Teacher #1 because they were interested (Redwood High School Lead Teacher #1, personal communication, December 22,

2021). As the newly hired RHS Principal had taken courses from the ORPP Director and was familiar with the College of Education, they were comfortable moving forward with the partnership, even though they knew little to nothing about it (Redwood High School Principal #1, personal communication, February 18, 2022).

The RHS Lead Teacher, at this point in time, had been teaching for 28 years in the district, all at the high school level in life sciences. The RHS Lead Teacher #1 had more than a dozen years in different teacher leader roles including Department Chair, Site Committee, and coordinating the district SMILE program. They were also very familiar with project based learning and professional development training (Redwood High School Lead Teacher #1, personal communication, December 22, 2021). According to both RHS Lead Teacher and new Principal, the newness of the ORPP and the Principal being new to their role in this particular district, having come from out of state, they both stated that it was a good opportunity to start a new relationship with each other collaborating on ORPP work (Redwood High School Principal #1, personal communication, February 18, 2022; Redwood High School Lead Teacher #1, personal communication, December 22, 2021). According to Lead Teacher #1, the collaborative work, “started well. [The RHS Principal] was new and so we worked together on a lot of the planning work right away on how we were going to roll ORPP work out that fall” (Redwood High School Lead Teacher #1, personal communication, December 22, 2021).

Very similar to the CHS narrative, RHS already had a very high graduation rate compared to the state average, and already had a high number of students taking dual credit courses through their local community college, and some through the nearest public four-year university as well. Naturally then, the improvement efforts at RHS went towards teacher professional development. In the last half of the 2016-2017 school year, prior to ORPP

involvement, RHS had conducted their own internal survey with both teachers and staff about both peer to peer student relationships and student to teacher relationships. What they found was that an alarming number of students felt disregarded, disrespected, and disengaged by RHS teaching staff. As the ORPP came online in the 2017-2018 school year, it was determined by district leadership that all schools K through 12 were to adopt a social emotional and classroom management curriculum called Conscious Discipline (CD; Redwood High School Lead Teacher #1, personal communication, December 22, 2021).

In the greater perspective of ORPP project implementation, this posed several potential challenges at the outset of its partnership work with RHS. On one hand the RHS Lead Teacher #1 was working closely with the newly hired RHS Principal, which was great, but they were working on implementing a ‘canned curriculum’ that, at the time, had little to no evidence behind it and was mandated by district leadership. What could the partnership do to help with RHS improvement efforts given the state of things? Ultimately, ORPP staff worked with RHS staff to help them plan PD in an effort to more successfully employ the CD curriculum across the entire RHS teaching staff. Over this first year, leading towards the Fall 2019 teacher PD survey, the RHS Principal and Lead Teacher were constantly hearing from staff that they felt like the CD curriculum was aimed at elementary grades and was a waste of time for high school staff and students.

Of the 42 total RHS teachers in the fall of 2019, 41 (98.0%) took the teacher PD survey. RHS had the highest rate of veteran teachers out of all four partner high schools with 68.3% having taught for more than 11 years, and 17.1% having taught for 6 to 10 years. The remaining 14.6% of RHS teachers at that point, had taught from 1 to 5 years. This means, that as a whole, the RHS teaching staff has been through a lot of professional development over the years. 78%

of the RHS staff perceived they had been through 2 to 3 PD topics at that point in the year, and the most frequent PD topic listed (79.6%) was Conscious Discipline<sup>®</sup>. No respondents strongly agreed that the CD-based PD was useful, 58.5% agreed it was useful, 29.3% somewhat disagreed that it was useful and 12.2% strongly disagreed about its usefulness. Regarding RHS teachers' perceptions of how knowledgeable and helpful the PD leader was, 19.5% strongly agreed, 68.3% agreed, 9.8% somewhat disagreed and 2.4% strongly disagreed. Regarding RHS teachers' perceptions of how supportive the RHS leadership was of the PD, 73.2% felt leadership strongly supported it, 22.0% felt leadership moderately supported it, and 4.9% felt leadership weakly supported the CD-based PD.

Similar to the CHS progression where there were no real viable graduation improvement strategy options, and dual credit from the local community college were already established prior to ORPP's partnership, all efforts went into teacher professional development. The one big difference was that the RHS Principal was involved in the development of it. As the 2019-2020 school year rolled around, the Lead Teacher #1 left RHS to take an administrative position within the district. They were generous enough to help select and involve RHS Lead Teacher #2 into the fold during the end of the 2018-2019 school year, where Lead Teacher #2 helped with CD PD trainings and other school wide systems work with the curriculum (Redwood High School Lead Teacher #2, personal communication, December 14, 2021).

In the 2019-2020 school year, RHS Principal and Lead Teacher #2 started to recognize that the teaching staff was not wanting to move forward with CD training anymore (Redwood High School Lead Teacher #2, personal communication, December 14, 2021). Recognizing this feeling, Lead Teacher #2 stated that there was,

“like a conscious shift between [myself] and [RHS Principal] to basically just say like here's what the district is telling us [to implement CD], but we need to just get

on board with this [towards a shift in recognizing what PD and additional systems were needed]... What also helped kind of just sitting reflecting in our ORPP meetings and thinking what we were doing and that was the year we started doing data teams” (Redwood High School Lead Teacher #2, personal communication, December 14, 2021).

With district permission, and ORPP support, RHS started to move away from CD PD, and through a deep examination of student outcome data, demographic data, attendance and office referral data collectively started to think more towards implementing grade level data teams in the short term, working towards a school-wide multi-tiered system of support in the long term. ORPP staff even traveled to RHS multiple times, with additional university faculty to help lead conversations and PD about setting up data teams and to discuss basic MTSS information. ORPP staff helped train Lead Teacher #2 on accessing school-wide data reports they were given permission to access, and how to examine that data and regularly provide reports to grade level data teams. As of this writing, the Conscious Discipline<sup>®</sup> has all been dropped from active PD at RHS, and the data teams are still in action. Because of the quick shift to online learning brought on by the COVID 19 Pandemic, ORPP was not able to work with RHS staff on implementing MTSS systems and structures in the school.

**Multicase Theme A – Approach in Identifying and Recruiting ORPP-partner schools.** Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with RHS was of “high utility” for analysis. Again, akin to the CHS section on Theme A, RHS had a very high graduation rate compared to the state average and had dual credit course work firmly established with multiple colleges in the geographic area. It is still unclear (in both cases) why they were recruited right at the start given there were (and continue to be) many more Oregon high schools who could use the partnership and improvement capacity building much more.



**Multicase Theme B – Ambiguous Goal Setting at the Start of ORPP.** Stake (2006)

cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with RHS was of “middling utility” for analysis. The ambiguity for RHS regarding goal setting did not necessarily come from uncertainty on the part of the partnership or the ORPP model, but rather confusion about the specific goals that could even be potentially identified and addressed given the schools high graduation rate, established and robust dual credit program and the decision from district leadership to implement the CD curriculum. These factors meant that the primary drivers for the ORPP model (i.e. the process outputs) were really necessary on many levels. Eventually, the ORPP worked with RHS focusing on helping to increase school improvement capacity building through the strong work relationship between RHS administration and lead teachers.

**Multicase Theme C – ORPP Work Alignment with District Vision and Mission.** The Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with RHS was of “high utility” for analysis. In an ideal partnership like this, the improvement work being implemented should have matched district visions and goals and should have had concrete data and reasoned decisions behind it. In an ideal partnership, the curriculum being adopted (mandated) should have been evidence-based or at least evidence and / or research informed. Within the timeframe of this project, neither of those were true. While RHS was aligned in their implementation of CD across the school, it was not a good fit and it took far too long for both school and district leadership to evolve their thinking on it. RHS is a good example of why required alignment is not a sure pathway towards success. In many ways, the short story of RHS’s evolution towards data teams and potential long-term implementation of a school-wide MTSS system can be looked at as a near success if not for the

pandemic interrupting the 2019-2020 school year. The ORPP RHS partnership was at the start of what could have been very fruitful collaboration.

### **Multicase Theme D – Role Clarity and Connection to School Partner**

**Administration.** The Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with RHS was of “middling utility” for analysis. Beyond the original issues of starting with a very high graduation rate, even for all sub-groups including students with disabilities at an 88% on-time graduation rate (Oregon Department of Education, n.d.) and established dual credit course work, which comprised 11 courses including college algebra and pre-calculus among others, role clarity and partnership between both Lead Teachers and the RHS Principal always remained high. As discussed throughout this project, the RHS Principal was the most closely connected administrator to the ORPP work. The Principal and Lead Teachers met at regular intervals during each week, and collaborated on the majority PD planning efforts (Redwood High School Lead Teacher #2, personal communication, December 14, 2021; Redwood High School Principal #1, personal communication, February 18, 2022).

**Multicase Theme E – Progress Measurement in Improvement Efforts.** Please see Juniper High School (JHS) Case-Study Synopsis, *Theme E – Progress Measurement in Improvement Efforts* for a response that applies to all ORPP-partner schools.

### ***Spruce High School (SHS) Case-Study Synopsis***

SHS is a suburban school in a medium size school district in central Oregon along the I5 corridor. During the 2017-18 school they defined 67% of their students as white and claimed 45 licensed teachers and approximately 900 total students. 71% of SHS students graduated on-time, compared to a statewide 4-year Adjusted Cohort Graduation Rate (ACGR) of 79% for the same

year (Oregon Department of Education, n.d.). In some ways the start of the SHS partnership was similar to other schools previously detailed, and in one central way it was very different. Similar to other schools, SHS became an ORPP school partner based on agreement with the district superintendent who had a previous relationship with College of Education leadership, and little to no conversation with SHS administration or school staff (Spruce High School Principal #1, personal communication, January 12, 2022). Once the SHS Principal was brought into the conversation, they iterated during the interview conducted for this project that, “If [ORPP Director] is in, I am in” (Spruce High School Principal #1, personal communication, January 12, 2022). The SHS Principal #1 recalled that when the ORPP was eventually discussed with them, their first thoughts were that the project was casting “too wide of a net,” that they already had dual credit established with the local community college, and that they thought they could use some help with PD around elevating school climate and culture (Spruce High School Principal #1, personal communication, January 12, 2022).

The big difference in the onboarding of SHS and other high schools into the partnership was that this researcher was asked to step into the Lead Teacher in the school. At the time, I was asked to help out with the up-and-coming ORPP project with a certain percent of my work duties and contract time with College of Education to be portioned off for it. Stepping into the Lead Teacher role, I was asked to portion off even more. Essentially, I was to embed myself at SHS for a certain number of days and hours a week, acting in an identical capacity as other Lead Teachers, working with administration and staff to help employ, at the time, what were the three main areas of ORPP improvement work (as previously detailed); (a) Research-based professional development, university-based dual credit courses, and school-wide systems work to improve student outcomes that were to lead to increased graduation rates.

Beginning in the fall of 2017, I started to meet with the SHS Principal on a regular basis. These initial meetings were essentially conversations about dual credit and school culture, particularly around teacher engagement as the SHS Principal felt the number of teaching staff who were having challenges engaging students was high. Dual credit conversations revolved around the potential of adding a university-based computer science course that were to be more intensive than the Computer Science 101 type dual credit course they had at the community college level. This current course did not cover enough of the type and rigor of material that qualified for university credit. As time went on, and the SHS Principal and I collaborated on these two areas several things became clear. First, the SHS Principal did not intend to allow me to attend any school leadership team or other related SHS work groups in trying to further any ORPP goals. The principal and I collaborated together for a while on an evidence and research informed system to evaluate teacher instructions looking for ways to measure engagement, with future plans to then take collected evaluation data and base instructional engagement PD on it. For many reasons this never made much progress, and administration was constantly engaged in other timelier tasks, and classroom teachers had zero interest in supporting this plan whatsoever for obvious reasons. As time went on, what transpired was that the SHS Principal wanted me to work with them in isolation more and more. Looking back, in my opinion, one weakness of the SHS Principals leadership was a lack of ability to delegate tasks, and crowd source staff efforts. It became clear I was not the only one who understood this challenge as others in the building recognized the same challenge. Second, in my many conversations with SHS and district staff, as well as computer science department faculty and other leadership associated with the ORPP project, a dual credit Computer Science (CS) course was not going to come to fruition for two reasons: (1) the university per credit cost was astronomically high compared to essentially near-

free credits from the community college, and (2) there was never going to be agreement on who the instructor of record was going to be for the course, as university faculty did not feel a high school CTE / CS teacher could handle the complexity of the course, and the SHS CTE / CS teacher and SHS administration felt that university faculty were not in a position to support high school students well enough for them to pass the course and receive the credit. As the credit cost issues were never overcome, the teacher of record issues was never followed up on in any real way. Towards the end of the 2017-2018 school year the decision was made to have an existing SHS teacher step into the Lead Teacher role for two main reasons: (1) I was unable make any progress in the areas of teacher PD, school-wide improvement efforts related to school systems and culture and dual credit, and (2) my responsibilities in helping to develop the broader ORPP project as a whole were increasing.

By the end of the 2017-2018 school year, I was brought on to the ORPP project full-time and a SHS teacher was recruited to step into the SHS Lead Teacher #2 role. This educator had been teaching at SHS for nearly eight years, and already had some other period release time to coordinate other school leadership duties (detailing those would provide too much detail about school identity).

In the 2018-2019 school year, the SHS Lead Teacher #2 faced many of the same dilemmas this researcher did as SHS Lead Teacher #1. By this point, the sole focus of ORPP work was around teacher professional development. Through a data collection and analysis system that ORPP leadership was developing and revising with ORPP Lead Teachers, that resulted in an improvement plan associated with a continuous improvement cycle, the SHS Lead Teacher #2 had landed on trying to implement grade level professional learning communities (PLCs) focusing on shared engagement strategies, common assessments and other related

content. They worked throughout that year implementing them and was making positive forward progress. As the SHS Principal recognized a similar need (which I recognized from my early conversations with them regarding their belief that many SHS teachers lacked skill around classroom engagement), they were on board with this idea and were collaborating to make it work. The ORPP was supporting this work, and was offering guidance in the organization of the PLCs, and offering research-based and informed content where applicable, though this posed challenges as well. The SHS staff frequently shunned outside advice when it came to their own curriculum as they felt they knew what was best for their students. This was particularly true as SHS content area departments had grown accustomed to becoming very siloed and acting independently when it came to their course curricula.

Of the 45 total SHS teachers in the fall of 2019, 41 (91.0%) took the teacher PD survey. SHS was one of the more veteran teaching staff in the ORPP, with 58.5% of them having taught for 11 or more years and 23.5% having taught for 6 to 10 years. 35.3% of staff had been teaching at SHS for 11 or more years, and 23.5% had been teaching there for at least 6 years. Of the 41 respondents, 67.7% believed there had been 2 or 3 PD topics in the year so far, with 17.6% believing there had been only one, and 2.90% determined that there had been six total topics. Topic-based PLCs (also labeled as ‘shared curriculum development’ and ‘common assessment’ work) comprised 73.2% of the total written answers regarding the content of that PD. Other answers included topics related to Special Education, as they were holding their own PD training schedule. This indicates that progress was being made regarding the progress of these PLCs.

Unfortunately, all of this progress was derailed in the next school year. Towards the end of the 2018-2019 school year, we learned through SHS Lead Teacher #2 that the school district was mandating data team training over the summer for certain high school leaders, and that in

the 2019-2020 school year the start of grade level data teams was required. This meant a shift away from focusing on an improvement of curricula and engagement strategies, and more towards tracking individual student progress through the grades. While there is certainly a lot of commonality between the two approaches, the districts grade level data teams were much more formulaic, essentially learning a prescribed system.

The ORPP helped in this new process where it could, focusing on helping SHS improve actual PD in communicating the new system and trying to continue supporting the development of common assessments when possible. This hyphenated work continued until the spring of 2020, when schools went online because of the COVID 19 pandemic. In the short time between the transition of in person school closing and online school starting and the end of the scope of this project, May 31, 2020 almost all ORPP work focused solely on helping teachers with any resources or tools they could use to improve their transitions to online learning and freeing network virtual meetings we were holding to really simply being a place to decompress and commiserate with the challenges they were all facing.

**Multicase Theme A – Approach in Identifying and Recruiting ORPP-partner schools.** According to the Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with SHS was of “middling utility” for analysis. The SHS on-time four-year graduation rate from the year prior to the Fall 2017 start of the partnership was below the state average at 71% (Oregon Department of Education, n.d.). While this left clear room for improvement in this specific area, there was no previous interaction with the SHS Principal prior to the school district superintendent agreeing to the partnership. As quoted earlier, the principal recalled thinking that, “If [ORPP Director] is in, I am in” (Spruce High School Principal #1, personal communication, January 12, 2022). However,

there was no determination of the school's readiness (as was there no determination in any other original partner high school) and it became clear that the certified teaching staff and administration were not so open to having an outsider involved in helping to improve their professional development or internal school systems that were attempting to improve academic outcomes.

The school already had a number of dual credit courses established with the local community college, including computer science. Computer science was of particular initial interest to ORPP leadership, though it never came to fruition at SHS or anywhere else. Not only were SHS dual credit courses sought after by its students, but that program was also running alongside a thriving Career Technical Education (CTE) program that included additional courses and internship opportunities outside of the regular high school curriculum with deep connections to the industry within the school's wider community.

**Multicase Theme B – Ambiguous Goal Setting at the Start of ORPP.** Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with SHS was of “high utility” for analysis. In relation to the potential for ambiguous goal setting in the initial SHS relationship, thoughts immediately come back to the interview with SHS Principal #1 and their recollections that their initial impression was that the project was casting “too wide of a net” (Spruce High School Principal #1, personal communication, January 12, 2022). With no input from certified and / or classified at SHS, all initial work of goal setting regarding professional development was left to the SHS Principal #1 working in isolation with this researcher on what the principal thought appropriate improvement goals should be. Quite often, school principals, and really their entire administrative teams, are bogged down in the day-to-day minutia of running a school (Buller, 2013). This was true at SHS



during my time there as the SHS Lead Teacher #1. It became clear relatively quickly that my time spent working with SHS Principal #1 was not going to create any sort of change momentum, unless I was able to work with the staff, leadership teams and administrative teams. For reasons already detailed, this was not going to happen, and as such, it was clear that my efforts in that role were not going to gain much if any traction.

### **Multicase Theme C – ORPP Work Alignment with District Vision and Mission.**

Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with SHS was of “middling utility” for analysis. In the first half of the partnership work with SHS, including the time this researcher was involved as Lead Teacher #1, the work being done was vague and feeble enough that it was unlikely to have led to any issues of vision or goal alignment in the form of being sidelined by any top down mandates from the district office. However, in the second half of the ORPP work with SHS, as previously detailed, ORPP-supported work being done around content-area PLCs being implemented by Lead Teacher #2 was shelved in favor for a mandate by the district office to develop and implement grade level data teams. As Leader Teacher #2 discussed, “... which was something [data teams] that the district that summer had just piloted you know, a year or so prior, to then saying all schools are going to have a data coordinator to setup grade level data teams... And that interrupted our current work (Spruce High School Lead Teacher #2, personal communication, December 21, 2021). ORPP worked to then support that shift from the start of the 2019-2020 school year, prior to the COVID pandemic. Once the pandemic forced the in-person closure of all Oregon K-12 schools, ORPP and SHS, along with the other high school partners, moved into a triage collaboration where ORPP staff and lead teachers were working to support each other and their teaching faculty in how to best transition to online remote learning.

## **Multicase Theme D – Role Clarity and Connection to School Partner**

**Administration.** The Stake (2006) cross-case analysis worksheets completed for this part of this studies investigation, ORPP implementation work with RHS was of “high utility” for analysis. As has been previously discussed, there were certainly role clarity issues with myself as Lead Teacher #1, and the poor relationship with the SHS staff as a whole. While the relationship with SHS Principal #1 and myself was very positive, it lacked a clear pathway on how efforts were going to be seen and adopted by the SHS Instructional Leadership Team and the staff at large. Ultimately, two specific challenges lead to the need for a SHS staff member to step in as Lead Teacher #2; (a) The SHS staff viewed me as a total outsider and did not see my presence within SHS as positive, and (b) working solely with SHS Principal #1 was too insular, and it meant their top down isolated style of leadership was going to make it very difficult for any of our efforts to be felt across the entire school without more staff buy in.

In speaking with SHS Lead Teacher #2 and their recollections of the first time they were made aware of being brought in on the ORPP project by SHS Principal #1, they stated that the principal said it was,

... a project with [a university in Oregon] that I think, honestly and this will probably come out and other discussions with the interview, I think, honestly, [SHS Principal #1] didn't present to me a super clear picture of what it was. I think his general presentation was... that we have some staffing [role] to place someone in a release time, and this will be focused around school improvement goals, is that something that you'd be interested in in taking on?" (Spruce High School Lead Teacher #2, personal communication, December 21, 2021).

So, even after a considerable amount of time for SHS Principal #1 to be working with myself as Lead Teacher #1 at SHS, the principal could not really iterate to potential Lead Teacher #2 what the main priorities and goals were in the ORPP, specifically at SHS.

**Multicase Theme E – Progress Measurement in Improvement Efforts.** Please see Juniper High School (JHS) Case-Study Synopsis, *Theme E – Progress Measurement in Improvement Efforts* for a response that applies to all ORPP-partner schools.

**Cross-Case Results**

Through cross-case analysis five common themes were defined. Those themes include; (A) the approach and identification processes in recruiting ORPP-partner schools, (B) the ambiguous nature of goal setting at the start of ORPP partnering with the four original high schools, (C) ORPP-related work and its alignment with partner school districts vision and mission, (D) role clarity and connection to administration at partner schools, and (E) measuring progress in process in ORPP’s improvement efforts. Table 17 below details how useful each school partner case was in coming to a conclusion in defining those common themes.

**Table 17**  
*Results of Cross-Case Analysis and Thematic Analysis*

	Theme A	Theme B	Theme C	Theme D	Theme E
School Site					
JHS	H	H	L	H	M
CHS	H	M	L	M	M
RHS	H	M	H	M	M
SHS	M	H	M	H	M

*Note.* CHS is an acronym for Cottonwood High School, RHS is an acronym for Redwood High School, SHS is an acronym for Spruce High School and JHS is an acronym for Juniper High School. For the Cross-Case Analysis (Stake, 2006) determination of each schools’ usefulness in determining the themes, H = High utility, M = Middling utility and L = Low utility. Theme A is the approach ORPP took in identifying and recruiting partner schools. Theme B is about the

ambiguity in which ORPP set goals at the start of the ORPP network. Theme C is how ORPP work aligned with school districts missions and visions. Theme D is about role clarity and connection to school partner administration. Theme E is the progress of measurement in improvement efforts with school partners.

Looking at Table 17, there are no obvious strong differences between schools or themes. JHS and CHS had the only low utility results given, both for Theme C (ORPP-related work and its alignment with partner school districts vision and mission). In short, this was because neither school had any real alignment issues with district vision and mission, while both RHS and SHS had PD content interfered with by their district offices. That interference manifested itself as the direction to incorporate Conscious Discipline as the main PD focus for RHS, and a mandated switch to data team's PD in the case of SHS.

More broadly, what this indicates is that across the other four themes the schools, in large part, had similar utility in helping to generate those larger thematic ideas. School partners shared more similarities when it came to the implementation of the ORPP model than differences. While there are certainly smaller differences between schools in how their utility was designated for each theme, as detailed previously in the Case Study Synopses, the *level* or amount of that utility was similar. Unfortunately, Stake (2006) does not go into great detail in defining the differences between high, middling, and low utility. They only state that, "High utility means that the Case appears to be one of the most useful for developing this Theme" (p. 323). The similar scoring across all school partners and themes likely suggests that results of analyses for this study apply relatively equally across all partner schools, particularly when it comes to factors directly associated with the identified themes, which align well with the proximal implementation outcomes being used to review the overall ORPP model performance in its first

two and a half years. This is also an indicator that the multiple case assertions being made below would apply relatively equally to all four partner schools and more broadly to the entire network and ORPP model.

### ***Multicase Assertions from the Thematic Analysis***

As previously defined, the quintain (e.g. the object or phenomenon to be studied; Stake, 2006) of this study is the act of implementing the goals and strategies of the ORPP across four Oregon high schools. This includes examining those efforts in particular from September, 2017 to May, 2020. Through the steps of Stake's (2006) cross-case analysis, as previously discussed, five common themes emerged that related clearly and easily to the proximal implementation outcomes from Proctor et al. (2011). Once those themes were established and each case reviewed according to those themes, the researcher then makes assertions about the defined Quintain. According to Stake (2006), these assertions (e.g. a claim or pronouncement) are made and defended based on information gleaned from the cross-case analysis. For this study, four assertions have been made:

*Assertion #1 – Initial recruitment for ORPP partner high schools was not targeted.*

There was a clear mismatch between original ORPP goals of what they wanted to help schools with and the schools that were brought into the partnership. In numerous cases, the schools simply did not need what was being offered. Every single partner school already had established dual credit courses with local community colleges and in some cases public 4-year universities. Some schools had more established dual credit programs than others, but none of the school partners were eager for a new dual credit partner. Two high schools (CHS and RHS) had significantly higher 4-year graduation rates than the state average. If the primary goal of

ORPP was to help schools improve graduation rates, it did not seem appropriate to recruit high schools whose graduation rates were 14% (CHS) and 16% (RHS) above state average.

In addition, schools were recruited based on existing relationships with school and / or district leadership (e.g. district superintendents) and not the willingness and readiness of specific high schools. While having strong positive relationships could have been an ideal entry point in approaching districts for potential partnership, preliminary school recruitment should have delved deeper into the overall need, readiness and willingness of school leadership and school staff for the potential partnership. School assessment could have been completed very quickly and easily. Determinants such as on-time 4-year graduation rates and the existence of dual credit courses could have been had through simple internet web searches of Oregon Department of Education report cards. Deeper dives into staff readiness would have taken more time, but considering the amount of resources being provided for this work over several years, those steps should have been taken to establish a more secure foundation of partnership with the most fitting high schools.

*Assertion #2 - From the outset, ORPP lacked clear goals on what school administrator roles looked like and what specific work was to be required of them.*

Intergovernmental Agreements with the four partner school districts were completed around the same time that this researcher was brought on to the ORPP project. However, those agreements were completed by the time my role with ORPP began, and no input on what was included in these agreements came from this researcher. In fact, I did not see them until much later. One example agreement (though all four agreements are nearly identical) was completed in January, 2018 with the district that includes Redwood High School, and details what was to be included in the original ORPP work. The agreement defines the partnership as a pilot program,

“designed to improve the academic and career outcomes for youth by providing onsite expertise and resources for Oregon schools” (University of Oregon, 2018). The same agreement goes on to state the ‘product’ of ORPP was to increase in graduation rates for high school students and increase the number of graduating high school students enrolling in higher education institutions. Among the specific duties described by the agreement, the Lead Teacher was to: (a) attend meetings on a regular basis at the Oregon university campus, (b) become “familiar with evidence-based practices developed at [the university]... and implement these practices at [RHS], (c) participate in developing and establishing dual credit coursework through the university..., (d) provide state-of-the-art professional development for educators, (e) motivate culturally diverse students to apply to Oregon higher-ed institutions, and (f) when applicable, coordinate training and field-based teaching experiences for teacher candidates” (University of Oregon, 2018, p. 4). While there a number of clear issues with these early goals and duties defined for the Lead Teachers, there were no clear ideas on how they were to engage with the rest of their school, school administration and district office leadership. Some of the biggest issues in the original goals revolve around how they were to become familiar with evidence-based practices developed at the university and what motivation or incentives faculty had to work with these individual teachers. Others include the vague notions around dual credit, how were they to assist in the development and establishment of university-based dual credit coursework when the university had no real dual credit program to begin with? However, looking through the body of work detailed previously for this project, one of the biggest issues apparent is the lack of a clear role for school administration and how they be required to work with the Lead Teacher in these efforts. As described in the four previous case synopses it is clear that school principals took many different approaches to the ORPP ranging from a hands-off

approach such as with CHS and JHS to my own personal experience with the SHS Principal #1 where I worked in isolation with them directly, not having any real access to the rest of the school staff. Throughout the semi-structured interview process, it also became clear that in all four cases, school principals were never really directly engaged about the partnership until after superintendents approved of it. They never had any direct input about what the partnership was to look like in their schools, and as such had very little buy-in to be directly involved in it. CHS and JHS Principals almost word for word stated that they handed off the entirety of the program, and had nothing else to do with it, particularly as it was funded outside of school funds, and so they did not feel it was within their defined responsibilities. While many of the original goals as defined in those first intergovernmental agreements seem infinitely complex for a single teacher to take on, particularly with the approximately two hours a day they had to work with, having no clear role of school administration certainly hampered efforts to meet them. For the entirety of the ORPP work with individual high schools, there were no set definitions for how the school administrations role was to be outlined, what parts they were to play in any of the work detailed above, or how they should have been involved with the ORPP as a whole.

*Assertion #3 - ORPP lacked a system to connect district vision and goals to improvement work being planned and developed with ORPP support at individual school sites.*

Similar to Assertion #2 and the lack of clear roles for school administration, ORPP lacked a clear system to connect work being taken on by the Lead Teacher to ongoing district vision and goals. From this own researchers' perspective, after working for three separate school districts for over a decade and working with many school districts across the country in my numerous roles at the Oregon university, school district hierarchies are complex. It is very common for individual teachers to have little to no direct communication with district personnel



for years on end. When direct communication does take place, it is often to do with human resource related issues like sick leave, pay issues, etc. Examining the results of the DCA, only 31.9% of all randomly selected emails contained any coded reference to the four proximal implementation outcomes (Proctor et al., 2011) being used here. Looking at the three ORPP process outputs (transfer of knowledge, identification and addressing of problems of practice, and increasing school improvement capacity) spread across those four proximal implementation outcomes, the overwhelming majority included coded content related to increasing school improvement capacity, which averaged 82.85% of identified emails. The inference being that most email communication at the critically important beginning of the ORPP revolved around increasing school improvement capacity, which included communication about the logistics of identifying, selecting, compensating, and arranging the schedule for the four ORPP-supported lead teachers. When it came to email communication regarding the topics (process outputs) of the transfer of knowledge (e.g. how ORPP staff and university faculty were to work with school and district personnel on helping to implement research-based practices (RBPs) and the identification and tackling of problems of practice (e.g. working with school staff to identify specific areas they had graduation-related challenges and problems instead of assuming they needed to improve graduation rates and implement dual credit programs) results of the DCA indicate that there was very little attention and energy given over to those critically important topics. Averaged across all four proximal implementation outcomes, email communication that involved the transfer of knowledge only accounted for 7.85% of all randomly sampled email communication. Similarly, averaged across all four proximal implementation outcomes, email communication that involved the identification and addressing of school-specific problems of practice only accounted for 28.18% of all randomly sampled email communication.

Examining the RHS Intergovernmental Agreement again, beyond the commitments given to the lead teacher as previously detailed, the districts own obligations amounted to pure compensation logistics that include ensuring that 40% of the lead teacher's time is dedicated to carrying out the detailed commitments and details of how the district was to invoice expenses to the university (University of Oregon, 2018). There is no language requiring any sort of partner participation from any district staff. Between Assertion #2 and this Assertion #3, it was a lost opportunity to not include a clear top down and bottom up two-way pathway for the partnership work. This lack of insight is one of the direct causes for why numerous times ORPP-supported improvement efforts lost momentum because school administrators were not directly involved, and top-down mandates came from district office staff that immediately derailed that work.

Including components in the intergovernmental agreements related to the transfer of knowledge and identification of problems of practice working in alignment with district vision and goals should have been in place to ensure more early communication at the school and district level in those critical areas. With this small inclusion written into these agreements, ORPP would have been more successful in achieving process output goals and on-going improvement efforts were less likely to have been derailed. Communication between ORPP staff, the lead teacher, school principal and district staff would have been more aligned, which could have led to a greater chance in the school in question seeing student outcomes improve and getting closer to achieving district vision and goals.

*#4 - ORPP lacked a system to bring evidence and research informed practices to schools in a meaningful way that they could successfully adopt and implement with ORPP support.*

As highlighted previously, school improvement efforts, including the implementation of evidence and research-based practices (Blasé, Fixsen, Sims & Ward, 2015), are difficult to

implement (Coburn, 2003). The teaching staff and administration team of any given school are busy with the day-to-day tasks of teaching, and find new improvement efforts complex and time consuming (Coburn, Penuel & Geil, 2013). Hoping to assist with sorting out some of these complexities and increasing improvement capacity was at the heart of the ORPP vision from the beginning. However, it lacked a clear purposeful system to bring RBPs to its partner schools in any meaningful way. Upon reflection through this work, there were several large road blocks that were never successfully navigated, including; (a) how university faculty were to be persuaded to provide quantities of time towards collaborating with ORPP-partners in certain areas, (b) how resource limitations were to be addressed in working towards implementing RBP systems and structures within schools, and (c) how the aforementioned vertical structure challenges were to be addressed within the partner-school and district staff.

While ORPP improvement efforts revolved around a Continuous Improvement Cycle (CIC) as Networked Improvement Communities (NICs) tend to, ORPP-partner schools were not required to identify a common area of improvement (i.e. Problem of Practice) across schools. These two traits are what generally define a NIC (Dolle, Gomez, Russell & Bryk, 2013). Recruiting schools into the initial ORPP based on their need to address this commonly identified problem of practice (PoP) could have been one way to address many previously mentioned road blocks. A common PoP could have allowed potential ORPP-funds to go to one university faculty member or university team to collaborate with the entire partnership instead of just one school. A common PoP would have allowed university-based ORPP-staff to spend time becoming much more informed in the given body of related scholarship to then work with all school partners in common improvement efforts. It would have also strengthened the relationships between Lead Teachers at each school. If schools would have been recruited, in part, based upon need in a

specific area school administration and district leadership would have almost certainly started the partnership with more buy-in, and it would have made vertical alignment efforts easier. It would have also meant that some partners, such as was the case with Redwood High School, would not have had pre-prescribed notions of incorporating ‘off-the-shelf’ curricula such as Conscious Discipline, which had little evidence behind it at the time. In essence, resources both from ORPP and the individual school districts could have been concentrated on one area of RBP and could have created a much stronger system to implement those practices across the whole network if a decision would have been made early on to recruit schools with common areas of improvement.

### **Research Question Results**

The current study utilized document analysis, teacher surveys, and leader interviews to depict the implementation of ORPP. Specifically, this study provided answers to the appropriateness of fit for the university’s ORPP research-practice partnership (RPP) vision and goals with school vision and goals, the feasibility of fit for each school, the adoption of ORPP (including its leadership model, improvement model, and the partnership more broadly), and the perceived acceptability of ORPP. This section summarizes results regarding appropriateness, feasibility, adoption, and acceptability.

### ***Research Questions***

The purpose of this study was to determine the degree to which ORPP’s process output goals were conveyed to its school partners by examining its early efforts through the scope of proximal implementation outcomes (Proctor et al., 2011). Different data were collected and analyzed in order to determine the success of those conveyance efforts, including; (a) ORPP work-related emails and documents, (b) partner-school teacher professional development survey responses and (c) semi-structured interviews with school partners. Resulting analysis was then

incorporated into cross-case analysis that resulted in four separate case-study synopses, thematic analysis and four separate assertions on early ORPP outcomes. Research question answers center on those ORPP process outputs within the scope of the four proximal implementation outcomes, and incorporates findings from all previous analyses.

**Research Question #1 - How appropriate was the fit of the original ORPP model (based on tenets of the Agricultural Extension service standard) for each school prior to the start of the partnership in the fall of 2017?** Appropriateness was previously defined as the perceived fit, as determined by network participants, of the potential ORPP with the schools existing values, individual setting and particular needs. Looking towards the ORPP process outputs discussed throughout this work, this question is asking for an examination of the perceived fit of partner schools and their needs regarding the potential transfer of knowledge of research-based practices in addressing their potential problems of practice / areas of potential improvement, and the capacity with which the school had to address those areas of potential improvement. The examination of these factors will be addressed by individual school partner. Broadly speaking, two of the ORPP-partner schools, both Juniper High School (JHS) and Spruce High School (SHS), were appropriate enough to fit into the partnership based on their graduation rates and other needs. Neither were ideal fits for numerous reasons including the existence of dual credit courses, and little to no understanding of the partnership from the perspective of the schools' actual administration. Both Cottonwood High School (CHS) and Redwood High School (RHS), on the other hand, should not have been deemed appropriate fits for the partnership, and should not have been included. There are certainly other high schools across Oregon that were more appropriate. The most striking reason for both is their high graduation rates, relative to state and national averages. They both had strong dual credit course structures in place, and in

the case of RHS had a previously identified area they were to work on district wide in the form of the Conscious Discipline curriculum and improving relationship building efforts with students.

In addition, when the results of the Directed Content Analysis (DCA) are applied across all four partner schools during this early implementation phase and trying to determine if the fit of the ORPP project (e.g. the innovation) was appropriate, it is clear that not enough focus on determining a match between ORPP process output goals and school values, settings and needs was completed. While a mistake in the early document preparation process for the DCA precluded an examination of results at the school level, across all schools very few emails and work documents focused on this critically important area of determining if the ORPP project itself was an appropriate fit for each identified school partner. As previously detailed, only a small percent of ORPP emails (31.9%) were identified as including content related to proximal implementation indicators. Of those 31.9% of emails that did, only 26.1% of them were related to appropriateness of fit. Of the 87 randomly selected ORPP work documents examined, 70.1% included content related to proximal implementation outcomes. However, of those only 18.3% indicated they were related to the appropriateness of fit for the ORPP project and partner schools. This is in addition to the fact that no readiness assessments were completed prior to the start of partnership work, and school administration had little to no input on whether they were to join on.

***Appropriateness of Fit for Juniper High School (JHS).*** In 2017-18, the year the ORPP began, Juniper High School had an on-time graduation rate of 73%, six percent below the state average (Oregon Department of Education, n.d.). By this criterion, JHS fit in the broadest sense that on its face, they could use help in improving their graduation rate. The JHS principal at the time looked favorably on the partnership and thought it sounded like a mutually supported

partnership (Juniper High School Principal #1, personal communication, February 11, 2022). However, according to interviews with both the JHS Principal #1 and the JHS Lead Teacher #1, at this point in time, they already had numerous programs with outside interests that were aimed at improving student outcomes, including increasing graduation rates (Juniper High School Principal #1, personal communication, February 11, 2022; Juniper High School Lead Teacher #1, personal communication, February 18, 2022). While it makes sense that JHS was used to these partnerships, and seemingly accepted them as a positive component of school climate and culture, it does not seem that school administration had the time or energy to devote much to this, newest, project. What was clear from the interview with the JHS Principal was that, based on initial conversations with the College of Education and ORPP leadership, they understood this program to mostly be about creating a pipeline for students to graduate and move on to higher education, particularly at the Oregon university in question. They worked with ORPP leadership to select JHS Lead Teacher #1 based on this understanding (Juniper High School Lead Teacher #1, personal communication, February 18, 2022). While not as robust as other ORPP-partner high schools, JHS did have an existing dual credit structure in place, partnering with both a local community college and four-year public university.

In this regard and based on publicly available data such as graduation rate from Oregon Department of Education report cards and the interviews conducted for this research project, JHS could have been an appropriate fit for the ORPP project, and the intended process outputs could have certainly been helpful to JHS students and staff. As stated earlier, no readiness assessments were completed to help determine if any partner schools' particular values, needs and capacities were a match for what ORPP was offering, however it appears their values and needs were aligned. In terms of capacity, they were able to staff the ORPP Lead Teacher position, though

there are questions about the fit of the first identified JHS lead teacher that will be discussed later.

*Appropriateness of Fit for Cottonwood High School (CHS).* In 2017-18, the year the ORPP began, Cottonwood High School had an on-time graduation rate of 93%, 14% above the state average of 79% (Oregon Department of Education, n.d.). As it has been established that the primary long-term outcome of ORPP's efforts were to help high schools improve their 4-year on-time graduation rates, on its face it appears that CHS was not an appropriate fit. According to the National Center for Education Statistics (NCES), in the same 2017-18 school year the national average Adjusted Cohort Graduation Rate (ACGR) was 85% (National Center for Education Statistics, 2021). The CHS graduation rate of 93% was higher than any state average in 2017-18 according to NCES. While comparing one high school's graduation rate to the average of an entire state is not an equal comparison at all, it is an indicator that their 93% on-time graduation rate is generally very high.

As the CHS case-study synopsis indicated, the CHS Principal #1 had no real input on whether the school he was leading was a good fit or not. Instead the district superintendent gave a green light to university leadership, and the partnership deal was struck. The principal's recollection on the goals of the partnership were mixed. Dual credit courses were firmly established with the local community college, but they recalled that they believed professional development across the school could be improved, and so this was what was focused on during the partnership. As earlier stated, PD revolved around student engagement and connection, not necessarily in the hopes academic outcomes could be improved, but rather to see if fewer students would request transfers to the alternative high school option in the district.



During this time at CHS, there was not an abundance of other outside entities offering to work with CHS staff, no other improvement programs per se, and the CHS Principal #1 saw the ORPP as something to simply pass on to the identified Lead Teacher. They saw no real role for themselves in the work, and saw no real value in them expending any other efforts in strengthening it, though ultimately, they did reflect on the value of the ORPP-supported PD that was being implemented. At the outset of the project, their biggest concern was how the Lead Teacher's part-time work with ORPP was going to negatively impact their scheduling.

Given the lack of a deeper readiness assessment and the knowledge that both a successful graduation rate and established dual credit course system was in place, it is difficult to think that CHS was an appropriate fit for the goals ORPP had established. While working to re-engage students and strengthening relationships with them is certainly a positive area of improvement for any school, the number of students that this work targeted was small and the cost to benefit ratio has to be thought of. There were certainly schools across the state who could have benefited more from the partnership with ORPP.

*Appropriateness of Fit for Redwood High School (RHS).* In 2017-18 Redwood High School had an on-time graduation rate of 95%, 16% above the state average of 79% (Oregon Department of Education, n.d.). As it has been established that the primary long-term outcome of ORPP's efforts was to help high schools improve their 4-year on-time graduation rates, on its face it appears that RHS was not an appropriate fit. Similar to the previous discussion comparing CHS' high graduation rate to the NCES national averages, RHS was well above it and much higher than any individual state average.

At the time the ORPP began with RHS, the school already had an established dual credit course partnership with both a local community college, and its nearest public 4-year university.

In the 2017-2018 school year, RHS listed five advanced placement dual credit courses, eleven additional dual credit courses, and sixteen additional career technical education (CTE) courses available to students (Oregon Department of Education, n.d.). Again, similar to CHS, they too were focused on improving engagement levels and relationships with students. While they had all of these outwardly successful student metrics, they had completed a student survey asking for their perceptions on how they felt about high school in general. This was prior to the ORPP. Based on those results, and other factors at the district level, they previously chose to incorporate the Conscious Discipline curriculum from kindergarten up through senior year.

The RHS Principal #1 that was hired just as the ORPP work was starting knew little to nothing about the project they had inherited from the previous administration. The previous RHS principal had no interest in the partnership (Redwood High School Principal #1, personal communication, February 18, 2022). RHS Principal #1 jumped on board based on the little choice they had, the positive perceptions they had of the already identified lead teacher and their prior experiences with University of Oregon College of Education faculty. All this to say that, as with the other schools discussed, graduation rates were high already, dual credit was established, the district had jumped into the partnership with no real input from the high school itself, and they had already identified an improvement curriculum to be introduced at all grade levels. In this regard, it was not an ideally appropriate fit for RHS to join the ORPP, and other Oregon schools could have potentially benefitted from the partnership much more.

*Appropriateness of Fit for Spruce High School (SHS).* In 2017-18, Spruce High School had an on-time graduation rate of 71%, 8% below the state average of 79% (Oregon Department of Education, n.d.). On its face it appears that RHS was an appropriate fit when looking at the broadest ORPP goal of helping schools to improve graduation rates. As with other ORPP-partner

schools, SHS administration had no initial input whether the school was to join the partnership or not. No readiness assessment was done. As already pointed out, SHS Principal #1 was on board with the partnership because of its association with the ORPP Director, however from the start they felt the overall project was not focused on specific improvement areas enough, and was unsure how university dual credit was going to work considering the existing dual credit partnership they already had established.

According to the 2017-18 school year report card from the Oregon Department of Education (Oregon Department of Education, n.d.) and my own personal knowledge of the school during this same time, they had a number of dual credit courses, particularly in areas of career technical education (CTE). The SHS 2017-18 report card does not enumerate the courses, but SHS has a reputation for its CTE-based dual credit courses, particularly around the health care field. From my own work with SHS, they did not have an abundance of outside partner organizations helping to improve outcomes and graduation rates.

As detailed previously, one of the early areas of collaboration was on the development of a dual credit computer science course that was to count for credit at the Oregon university in question. The existing computer science course at SHS only counted for credit at the community college level, but was determined too rudimentary to count for even the most entry level course at this specific university in Oregon taught by their computer science faculty. In a way, the failure to establish this computer science course with SHS encapsulates the overall challenges ORPP faced in establishing any dual credit within the partnership. SHS already had an existing computer science course. The number of students who took that course, and who were interested in a second more complex one was likely to be small. Getting the Universities computer science faculty on board with this new course offering would have been a gigantic mountain to climb,

though many initial conversations were held. Many of the community college courses taken by high school students within the ORPP, including SHS students, were free or nearly free. Often times, the community college credits themselves were free through a state-wide initiative, and so families only had to pay for the registration costs, which were almost always less than \$100 in total. SHS, along with two other ORPP-partner schools, had earmarked funds that paid for students' registration costs. But most likely the largest hurdle was going to be with the University, as a whole, allowing high school-based dual credit to exist in the first place. To date, and unlike other public universities in Oregon, the Oregon university in question has not established a dual-credit program beyond some math courses, where local high school students come on to campus to take the course with the university faculty, and almost always in person. The largest sticking point in getting any ORPP-based dual credit implemented was the large costs involved compared to community college credits, and the disagreement about who was qualified enough to teach these courses. The university-based dual credit computer science course at SHS never materialized, despite a year and a half of effort between both SHS Lead Teacher #1 (myself) and SHS Lead Teacher #2. This experience encapsulates the failure of ORPP to establish dual credit because of three core reasons: (a) there were already existing dual credit courses meeting most or all of the current needs at the high school level, (b) the university per-credit costs were simply too high compared to other options, and (c) there was not enough desire at the university level to compromise its position on who was going to teach the course and how.

For these detailed reasons, SHS could have been an appropriate fit for the ORPP project, though far from an ideal one. A basic readiness assessment would have shown that on its face, SHS had room to improve, particularly in relation to its on-time 4-year graduation rate. At the

time, they did not have an abundance of outside organizations working with their staff to improve outcomes, and they had a willing, though somewhat ‘out of the loop’ administration when the district signed SHS into the partnership.

***Finding More Appropriate School Partners.*** Essentially, the first identified theme determined through the previous comprehensive thematic analysis comes from the same root understanding that helped to determine how appropriate the fit of the original ORPP model was for each school as the partnership began in the fall of 2017. When it comes right down to it, there were faults in the approach to how schools were identified and recruited for the ORPP. In the early interview completed with the Dean of the College of Education at the Oregon university in question (and originator of the Oregon Research Practice Partnership) he stated that there were two main criteria for schools being identified and selected for ORPP; (1) geographic targeting and (2) self-selection. Dr. Kamphaus wanted to, “represent and better serve coastal, rural and urban Oregon, and our home [meaning a high school within Lane County and / or the Eugene 4J School District] (R. Kamphaus, personal communication, May 12, 2020). Essentially, to initially qualify, a school partner needed to be from one of those geographic areas that were determined to lack university representation, and they had to volunteer (i.e. select themselves into the program). The Dean went on to say that, “We... wanted to serve schools that did not have a strong connection to the university. In other words, we wanted to branch out” (R. Kamphaus, personal communication, May 12, 2020).

Regarding appropriate fit, the main lesson learned here should be that high schools are large complex systems that include an infinite array of personnel, structures, needs, student populations, staff dynamics and outcomes and that recognizing and understanding these differences should be a top priority when they are being identified as a potential partner in this

type of collaboration. A future Research-Practice Partnership (RPP) or Networked Improvement Community (NIC) should; (a) gather and evaluate all public facing data available on the school, (b) communicate with the schools' administration, not just district leadership, in trying to determine the school's values, setting and (maybe most importantly) needs, and (c) complete a needs assessment process that is particularly focused on the partnership organizations (e.g. ORPP) specific process output goals. Creating a new partnership, where schools share similar needs and levels of readiness, would create a more unified starting point, allowing for implementation to begin with a strong foundation and more likely buy-in from all partners.

**Research Question #2 - How feasible was the fit of the original ORPP model (based on tenets of the Agricultural Extension service standard) for each school during early implementation from fall 2017 through to May 2020?** Feasibility was previously defined as the extent to which the ORPP, and its process outputs, could have been successfully enacted and utilized with each partner school (Proctor et al., 2011; Lewis et al., 2015). Essentially, once the partnerships began, what was the likelihood of success? For this work, it seems that feasibility cannot be determined without heavily leveraging the findings of the determination of appropriateness of fit with the same schools. For example, if Redwood High School (RHS) was determined to not be an appropriate fit because of its high graduation rate and established dual credit course system, among other reasons, it stands to reason that those factors were not going to change soon, and somehow make the partnership feasible once it began. Instead what can be determined is a continued finding of an improper fit with those particular schools because of additional findings. On the other hand, JHS and SHS, while it was determined they were marginally appropriate fits at the start of the project, could easily be determined as not feasible

once work began for new factors unknown or not completely understood prior to the actual implementation of the ORPP improvement efforts.

In addition, enactment and utilization of ORPP process outputs across all four schools was low as determined by the Directed Content Analysis (DCA). As detailed in the previous discussion of this projects limitations, it is unfortunate that the DCA results cannot be applied to individual schools here. However, broadly across all four schools, out of 158 total emails that were determined to contain any content related to the proximal implementation outcomes being examined here, only 55 (33.3%) were related to the feasibility outcome. So, similar to the appropriateness outcome (26.1%) not enough focus of early communication was on determining the feasibility of ORPP process outputs being incorporated into partner school's improvement efforts.

The feasibility of what ORPP was offering in regards to its broad goal of improving high school graduation rates, through the work of its three process outputs was sound. Ultimately, three of the four partners showed signs that the work in those schools could have feasibly been successfully enacted and utilized. Redwood High School was the only one that just simply had too many challenges in place for any real success to be feasible. Beyond their high graduation rate, and established dual credit program, the district had already selected a district wide curriculum to address the perception that students were did not feel safe in their school environment and did not often feel connected to their teachers. CHS, JHS and SHS all showed signs that ORPP process outputs could have successfully been enacted and utilized, though CHS had fundamental issues similar to those at RHS with a high graduation rate and established dual credit program.

***Feasibility of Fit for Juniper High School (JHS) in the New ORPP.*** As previously detailed, JHS could be considered an appropriate fit for the ORPP at its onset. An examination of the feasibility of the first two and half years of implementation of the ORPP at JHS indicates that

its process outputs could have reasonably been enacted and utilized more successfully if more implementation guidance and planning were incorporated from the start. However, a number of factors led to minimal commitment and engagement of those ORPP process outputs, which will be discussed later with adoption.

***Transfer of Knowledge at JHS.*** Working with JHS staff, particularly Lead Teacher #1, it became abundantly clear that there were a number of outside education-focused organizations already working with JHS, and its school district, to help improve student outcomes leading to increased graduation rates. While beyond the scope of this project, it can be assumed that these other organizations were attempting to bring forms of RBPs with their efforts to JHS. In coming to JHS to do the same, the ORPP was, in essence, trying to find room at the ‘improvement table,’ to ingratiate itself into these crowded and ongoing associations. In that regard, it is doubtful that any real transfer of knowledge and incorporation of RBPs addressing an identified problem of practice were going to successfully be utilized by JHS in such a crowded space, particularly with the acknowledgement that ORPP lacked an established mechanism to do the transfer work.

Working through Lead Teacher #1, who was a relatively new teacher and was not deeply connected to all of the existing systems, structures and norms within JHS, made this work more difficult right from the start. Having a more veteran teacher who held leadership roles within JHS, and who knew how to organize and deliver professional development would have helped build momentum regarding the transfer of knowledge (e.g. research-based practices) into JHS. The difficulties were compounded when one recalls the knowledge that JHS Principal #1 believed that the main role of Lead Teacher #1 was to help create and facilitate a recruitment pipeline of JHS students to institutions of higher education, namely the Oregon university in question.



***Problems of Practice at JHS.*** Similarly, working in JHS, with Lead Teacher #1, ORPP faced associated issues with regards to efforts in identifying and addressing problems of practice. ORPP staff lacked an established system for the Lead Teacher to investigate and determine Problems of Practice within their schools. Knowledge of this type of work is not within the experience of a normal classroom teacher. One early approach of ORPP staff was to have its Lead Teacher partners help in the creation of one. However, the JHS Lead Teacher lacked a number of fundamentals for this work, including an understanding of school data systems, and experience in organizing and delivering professional development. Also, ORPP did not mandate a direct close ongoing relationship with JHS administration, which would have helped in the collection and examination of school wide data to help in the identification of problems of practice. Because of these factors, the JHS Lead Teacher struggled for some time in getting traction in these areas and ultimately moved towards creating ‘teacher self-care’ days because the initial idea of whole-school trauma informed care was to take care of the teachers first. Later came a team of teachers, working with Lead Teacher #1, where they did do some limited trauma-informed care PD, and a student organization was started which focused on recognizing and healing trauma they had experienced.

***Increasing Improvement Capacity at JHS.*** In its most simplistic view, compensating a classroom teacher for 40% of their contract time so they can spend that time working on school-wide improvement efforts is going to successfully increase school improvement capacity. It may not make improvement efforts more successful, but the capacity to do so is there. However, two factors already mentioned made it unrealistic that any improvement would be made with ORPP’s partnership with JHS. As detailed already, ORPP lacked a proven and reliable system to both identify problems of practice and transfer knowledge in the form of RBPs into schools to address

those problem areas. Second, because of ORPP's vague vision and goals from the outset, the JHS Principal #1 was mistaken in the goals of the partnership as a whole and the work to be undertaken by Lead Teacher #1. Last, JHS Lead Teacher #1 lacked the experience and knowledge to help craft those systems to help improve JHS student outcomes. These same factors hold true when the creation and implementation of university-based dual credit courses at JHS are considered. The same capacity and knowledge transfer challenges that halted any real momentum is addressing the schools identified problem of practice, in addition to the challenges that came from the university side of the partnership, prohibited any momentum regarding dual credit as well.

***Feasibility of Fit for Cottonwood High School (CHS) in the New ORPP.*** As previously detailed, CHS is not considered an appropriate fit for the ORPP at its onset. Examining the feasibility of the first two and half years of implementation of the ORPP at CHS has to include this inappropriate fit, specifically when the already high 4-year graduation rate and established dual credit course system, are considered. The ORPP-supported work at CHS exhibited some of the most promising and feasible early efforts among the entire partnership in creating momentum for ORPP process output goals. However, the long-term feasibility of that work is questionable considering its high graduation rate and established dual credit system. Ultimately, early efforts to enact and utilize ORPP supports (i.e. process outputs) should be considered successful (i.e. feasible), though questions remain if the identified problem of practice, and incorporation of RBPs into CHS PD were enough to improve any student outcomes leading to an increase in overall CHS graduation rates.

***Problems of Practice at CHS.*** As previously detailed, CHS was focusing on a problem of practice that involved students voluntarily leaving to go to the area alternative high school. It was

determined that students were leaving because they deemed it easier and more enjoyable, based on student wellness survey data and numerous student exit surveys (both realized with ORPP support) they took as they transferred to the alternative school. The CHS Lead Teacher #1 used numerous ORPP-provided tools and supports to determine that there was a low level of overall student engagement in the school, and a number of students felt CHS staff did not enjoy working with students in general. The history of this process should be considered a success regarding how ORPP tools and support were enacted and utilized at CHS, but questions remain about how the identification of this specific PoP (e.g. low student engagement) could realistically be addressed in any long-term measurable way when their graduation rate was already so high. Would an increase in perceived student engagement manifest itself in improved grades and / or course pass rates? Decreased office discipline referrals? Fewer students choosing to leave to the alternative school? Unfortunately, the COVID pandemic and shift to online school cut short the time to try and find answers to these questions.

*Transfer of Knowledge at CHS.* CHS was the most successful at knowing what they needed, asking for support in finding RBPs for it, and implementing those RBPs into the whole-school PD led by CHS Lead Teacher #1. This happened with no real input (nor interruption) by the CHS Principal #1. Among the RBPs were strategies around project-based learning and general engagement strategies for students. These areas were introduced through ORPP-supported PD, with regular follow-up professional learning communities where these strategies were discussed and classroom implementation planned. Again, ORPP lost the opportunity to measure these efforts more because of the COVID pandemic, and move towards online virtual school in the 2019-2020 school year.

***Increasing Improvement Capacity at CHS.*** As previously detailed numerous times, CHS Principal #1 handed off all responsibility of ORPP work to CHS Lead Teacher #1. During the semi-structured interview with CHS Principal #1, they said that ORPP-supported PD was “... really effective [and] probably one of our best PD... you know thinking back [over] a two-year block of PD... that we’ve had here in a long time (Cottonwood High School Principal #1, personal communication, March 24, 2022). Looking to the feasibility of how the ORPP process output of increasing improvement capacity was enacted and utilized it was done well, except for a lack of interest and effort from Principal #1. However, as the district leadership did not interfere, during this time, and Principal #1 gave full control of PD over to Lead Teacher #1, the actual utilization went well. That said, questions remain as to how much these efforts would have actually improved school outcomes, whether it was looking at the number of students voluntarily leaving to the alternative school, or the longer-term effects of this work on graduation rates, and the slim margin of possible improvement.

***Feasibility of Fit for Redwood High School (RHS) in the New ORPP.*** RHS is not considered an appropriate fit for the ORPP at its onset. As with CHS, the inappropriate fit at the start has to included when feasibility is considered, again in relation to the high 4-year graduation rate and established dual credit course system at RHS. Where CHS enacted and utilized a number of measurement efforts in determining student engagement and RBPs in areas of project-based learning and general student engagement, RHS was completely focused on the district-determined Conscious Discipline curriculum (in all K-12 grade levels), which had been selected before the start of the ORPP began. Because of these factors, the ORPP had little to offer RHS to help increase their already very high graduation rate. Given all of this, it should be considered *infeasible* that ORPP would be able to successfully implement its process outputs into

the improvement efforts of RHS, nor see any improvement in graduation rate because of those small efforts.

***Problems of Practice at CHS.*** The initially identified problem of practice at RHS was, similarly to CHS, a low level of engagement from students and their perception of poor relationships with RHS staff. RHS administration and staff also felt that these problems were also manifesting themselves in an increase in Office Discipline Referrals (ODRs). These engagement and relationships perceptions were determined through a whole-school survey that had been completed prior to the ORPP, in the spring of the 2016-2017 school year. A similar survey had been completed throughout the district, which led to the district leaderships' decision to incorporate the Conscious Discipline (CD) curriculum across the district, at considerable expense. All of this to say that, essentially, RHS was closed off to any additional RBPs being introduced and implemented because CD was mandated from the district office.

***Transfer of Knowledge at CHS.*** Because of CD being mandated as a solution to the perception of low engagement and poor relationships with RHS staff, there was little for ORPP to support other than looking at how the CD curriculum itself was implemented, primarily through professional development. This notion was really one of the main drivers for ORPP focusing so much effort on partner schools developing and delivering PD based on practices supported by research. It led to the development of a one-page summary document provided to ORPP Lead Teachers indicating what research showed to be successful in professional development implementation. Some topics covered within this document revolved around strong support from building leadership, intensity of the PD and active engagement strategies, and follow up coaching. Much of this document worked its way into the eventual ORPP Improvement Model document, which attempted to support schools' efforts to identify problems

of practice, setup structures and strategies to address them, and measure outcomes. This system was developed in the hopes that partners like RHS, even with specific curriculum being mandated from the district office, may be able to still work within the ORPP improvement system and ultimately reach their intended improvement goals. Again, the COVID pandemic, and move to online school simply stopped these efforts in their tracks as schools were completely focused on the simple logistics of the transfer to online school, and making it through each day.

***Increasing Improvement Capacity at RHS.*** The one area that RHS shined was in the enactment and utilization of the Lead Teacher as a leader and though partner in improvement efforts with RHS Principal #1. Simply because RHS Principal #1 was open to the improvement work, and likely being more of an instructional leader than the other partner school administrators, they setup regular meeting times where Lead Teacher #1 and Principal #1 met weekly to discuss professional development and related improvement efforts (through an advisory course curriculum they were co-developing but still wrapped around CD content). Through this successful relationship, ORPP leadership began to recognize how much more the vertical partnership at RHS was able to effectively enact and utilize the support ORPP was offering, however insignificant it may have been.

***Feasibility of Fit for Spruce High School (SHS) in the New ORPP.*** SHS is considered an appropriate fit for the ORPP at its onset, as previously stated. An examination of the feasibility of the first two and half years of implementation of the ORPP at SHS indicates that enough of its process outputs *could have reasonably* been enacted and utilized more successfully at the school, if ORPP had had more clear vision and goals itself and if it had been more ready and able to implement stronger guidance and planning support from the beginning.

***Problems of Practice at SHS.*** As previously detailed, SHS had a uniquely rocky start because this researcher was identified as the first SHS Lead Teacher. This led to a predicament as the work undertaken between myself and SHS Principal #1 became isolated and did not align with other improvement efforts going on within the school, particularly with the SHS Instructional Leadership Team. What this amounted to was the SHS Principal #1 taking it upon themselves to identify a Problem of Practice (PoP) that we (the SHS Principal and myself) were to work on. Similar to other schools, the identified SHS PoP was around a lack of teachers engaging their students with course curriculum, leading to an abundance of failing grades. SHS Principal #1 did use data in coming to this decision, mainly around the number of required core courses students were failing, and the high number of credits they were behind by their junior year. They somewhat jumped to the conclusion of a lack of classroom engagement through their own personal determination. Again, as Lead Teacher, I was isolated from the rest of the staff to a certain extent, so took this conclusion at face value based on the principal's own perceptions. This PoP, given the goal of ORPP process outputs, could have feasibly been successfully addressed through an appropriate transfer of knowledge with great enough school-wide improvement capacity.

***Transfer of Knowledge at SHS.*** Collaborative work between myself and the SHS Principal #1 working to address the poor classroom engagement PoP revolved around improving professional development and creating a quick classroom observation tool. Data collected through that tool was to be used to analyze to help determine specific tracks of teacher professional development. In hindsight, part of the disconnect with the rest of the SHS staff may have come from the fact that this improvement work revolved around teacher observations, and on some level, teacher evaluation though there was to be no official repercussions from, only

broad data gathering. Eventually, when I stepped away from the SHS Lead Teacher #1 role to focus more broadly on ORPP efforts such as the continuous improvement cycle work and data collection tools to be used by all partners, Lead Teacher #2 was selected and they started working in the additional improvement areas already detailed.

***Increasing Improvement Capacity at SHS.*** One of the most important lessons learned in the early work with SHS was that the Lead Teacher for any partner school must come from the school itself, where they will have an immediate level of buy-in and status within the staff community. Choosing a well-respected more veteran teacher who has held previous leadership type roles will help increase that buy-in. In my time as Lead Teacher #1 at SHS, I truly did not add much to the improvement capacity because I was only working with the SHS Principal #1 and they had limited time available and the work we did was not likely to get much traction or buy-in with staff because of the context of the classroom observation and evaluation forms. See Appendix H for the last version of the SHS Classroom Observation form prior to my leaving as SHS Lead Teacher #1.

Between my own experience as Lead Teacher #1 and the experience of working directly with Lead Teacher #2 and Principal #1 at SHS, it is clear that the *potential* for ORPP process outputs to be enacted and utilized was there, but again ORPP was not able to successfully take advantage of that because of some perceived staff and administration challenges as previously discussed, but mostly because ORPP was simply not able to make more of the opportunity early on in that first two and a half years because of vague strategies in how it approached improvement work, and unclear roles and duties for the SHS Lead Teachers and Principal #1.

***Making More Happen with What Was Feasible.*** Like determining the appropriateness of fit for the original school partners, the determination of the feasibility of that fit is directly



connected to the second identified theme that arose from the earlier thematic analysis: There was unclear and ambiguous goal setting at the start of the ORPP that hampered efforts in getting the ORPP model, and its three process outputs successfully enacted and utilized in partner schools. In addressing these missteps, some suggestions to future Research-Practice Partnerships (RPP) or Networked Improvement Communities (NIC) include; (a) the creation clearly defined roles for all roles in the partnership including those on the research (i.e. university) side and those on the school side, (b) having processes in place to immediately start work in identifying and addressing partner schools problems of practice (if one has not been predetermined as in the case of most NICs), and (c) establishing expectations and resource pathways to connect partners to research-based practices (RBPs), including university faculty where appropriate.

**Research Question #3 - How has each ORPP-partner school differed in their overall adoption (including their original intent and eventual uptake) of the output goals from inception through to May, 2020?** Adoption was previously defined as the extent to which ORPP partner schools committed to and engaged with the Lead Teacher, the ORPP improvement model (as it changed and evolved in that first two and half years) and the partnership as a whole. While feasibility looked at the likelihood of success, adoption looks at actual success. For any goals to be met, surely school staff, particularly those directly engaged in partnership work, have to be committed and engaged with the ORPP work. So, looking backwards at those first two and a half years, what was the level of adoption by school staff? While determinations of appropriateness of fit and feasibility of fit certainly impact overall adoption, they are not directly connected. For example, RHS which was determined to not be an appropriate fit nor a feasible one when it came to the potential for the enacting and utilization of the ORPP model and its

process outputs, could still be determined to have been highly committed and engaged in the work that took place.

Evidence of adoption by all partner schools, as examined in the Directed Content Analysis (DCA) of both ORPP emails and ORPP work documents, was lower than any other proximal implementation outcome. Of the 158 total emails that showed examples of any proximal implementation outcome (again, only 31.9% of all randomly selected emails examined), emails that contained examples of adoption (e.g. language showing school staff were committed and engaged in the specifically required ORPP work like working within the ORPP improvement model) only accounted for 21.5% of them (34 out of the 158 positively coded emails). Of those 34 emails, 22 of them were coded for evidence of the process output of increasing school improvement capacity (again, the most common process output coded across all proximal implementation outcomes in examined emails), meaning there is a good chance those email communications were about logistics regarding Lead Teacher contracts, release times, meeting times, etc. as those were heavily prevalent among that specific process output. DCA of ORPP work documents fared little better when it came to looking for examples of adoption by partner schools. Of the 70.1% (61 of 87) randomly selected work documents that were determined to include examples of proximal implementation outcome content, only 15% (9 total) contained content related to the adoption outcome. Though, the process output of increasing school improvement capacity did only make up 44.4% of those examples (4 of 9).

Broadly speaking, DCA indicates that email communication did not often include content related to school partners adoption of the ORPP model in real terms, beyond just thinking about what was feasible. When it came to real work and efforts at real implementation of the ORPP model, there was a lack of communication about it from both principals and lead teachers at all

partner schools. When it comes to thinking about the implications for a lack of representative ORPP work documents related to adoption, one interpretation is that there were a number of other, separate, ORPP endeavors being focused on that did not directly impact work with partner schools.

Ultimately, all four schools exhibited low levels of overall adoption (e.g. commitment and engagement with different aspects of the ORPP model). While partner schools did engage in different aspects of the ORPP model in different ways, no one school exhibited a greater relative level of adoption of the model, and the process outputs, than any other. However, each school did approach higher levels of adoption in different facets of the partnership, which does allow for some conclusions to be drawn, and suggestions to be made for similar future partnerships.

***Level of Commitment and Engagement of Juniper High School (JHS) and The ORPP Model.*** JHS was in a position to feasibly enact and utilize the ORPP model and its process outputs. Their graduation rate was below the state average, and while they had a dual credit program, as previously discussed it was far from robust. The opportunity was there, even if other educational entities had already been engaged with JHS in similar efforts. However, several factors appear to have gotten in the way of JHS firmly adopting the ORPP model. JHS, one of the first to join the partnership received mixed messaging about vague goals. JHS Principal #1 recalled that the original goals of ORPP were to establish a university-based dual credit program create a pipeline for JHS graduates to attend the university (Juniper High School Principal #1, personal communication, February 11, 2022). After the JHS Lead Teacher #1 was identified, the JHS Principal #1 essentially ended their personal engagement with the project as they felt it was not within their role or responsibility. Even at a point when the JHS Principal #1 felt that the program work was off track from their initial understanding of what it entailed, they did not step in at all.

The JHS Lead Teacher #1, while passionate about their work with minority students at JHS, was challenged by the vagueness of the ORPP model. As detailed in the JHS Case-Study Synopsis and the thematic analysis their progress was hampered by two of the identified themes of (a) a lack of ORPP model alignment with the school districts vision and mission, and (b) a lack of role clarity and connection to school partner administration. The JHS Lead Teacher #1, who was not a veteran teacher and lacked educator leadership skill and knowledge and who did not have a deep connection to the rest of the JHS staff, would have greatly benefited by ORPP helping to establish a clear connection between their work at JHS and the district vision and mission. That connection would have provided clarity and guidance. Instead their efforts struggled to gain traction, particularly around the aforementioned trauma informed teacher professional development. Where they succeeded was in the creation of student-led trauma informed care group, which eventually grew beyond the scope of the ORPP model, and led the JHS Lead Teacher #1 to pursue this work beyond the school setting, and they left their position (Juniper High School Lead Teacher #1, personal communication, February 18, 2022).

These challenges can be inferred in examining some of the results already detailed from the fall 2019 teacher survey data. JHS had a much smaller completion rate for this survey (41.5%) compared to other schools (CHS 100%, RHS 97.6% and SHS 75.5%). The JHS Lead Teacher #1 had the same ORPP support, but potentially lacked the support needed from JHS administration and buy-in from JHS teaching staff to get a better completion rate. This hints at poor adoption before even looking at the survey results themselves. JHS staff who filled out the survey struggled to correctly identify the trauma-informed PD that JHS Lead Teacher #1 had been working on, at that point in time, for nearly two school years between the last half of the 2017-18 school year, and the first half of the 2019-2020 school year. This was even after the JHS

Lead Teacher #1 was able to connect with and build out a team of more veteran staff to collaborate on trauma-informed PD in the 2018-2019 school year, after having attended more than one teacher professional development conference whose sole focus was on trauma informed care content in the K12 environment, paid for by ORPP (Juniper High School Lead Teacher #1, personal communication, February 18, 2022). By the fall of 2019, JHS staff struggled to identify PD content topics they had received just in that school year, with the most frequently identified category an amalgamation of *unknown*, which included written responses such as ‘all over the place’ and ‘no one topic.’ The JHS Lead Teacher #1 struggled to correctly follow through with the ORPP improvement model, and frequently missed deadlines for completing the work involved.

Of the JHS survey respondents, 36% disagreed when asked if the PD received to that point in the year was useful. Only 40% of those same respondents felt the JHS administration moderately supported the PD, and 28% felt their fellow teachers strongly supported the PD, and 40% felt their fellow teachers moderately supported it. Not a strong message of adoption of the ORPP model at JHS, when the primary mode improvement activity at that point revolved around the delivery of the PD by the Lead Teacher #1 and the staff she recruited to help.

In the cases of both the JHS Principal #1 and Lead Teacher #1, neither were as committed and engaged with the ORPP model as they could have been for the reasons detailed here. However, it is important to reiterate, that much of this blame has to fall on the shoulders of the ORPP model (still in early development itself), and the team working to implement the model, including this researcher.

***Problems of Practice at JHS.*** The initially identified Problem of Practice was the perceived high degree of trauma students were bringing to school with them, manifesting in

different ways, and the idea that JHS staff were ill equipped to help those students. The identification of this Problem of Practice decided prior to the selection of the JHS Lead Teacher #1 using an unknown teacher survey completed prior to the start of the ORPP in the fall of 2017. While beyond the scope of this project, even the second identified Problem of Practice was determined outside of the ORPP Improvement Model by the second JHS Principal. In simple terms, JHS did not adopt the ORPP Improvement Model to help identify Problems of Practice through its school data collection and examination process.

***Transfer of Knowledge at JHS.*** JHS also struggled to accept knowledge transfer in any meaningful way through the ORPP model and partnership. Though the JHS Lead Teacher #1 did likely acquire some RBPs and strategies regarding educator-based trauma informed care for students, it does not appear that the knowledge transferred into the JHS teaching staff much at all based on survey results.

***Increasing Improvement Capacity at JHS.*** The JHS Lead Teacher #1 is an energetic and compassionate organizer outside of confines of JHS. However, they struggled to gain much traction in their work as Lead Teacher. As already explained, an essential lesson for this work is in the idea that the experience and knowledge of the Lead Teacher is important in how they are able to engage with the RPPs improvement model and how they are able to work towards the whole school adopting it and the partnership as a whole. In the case of JHS, between the Principal #1 and Lead Teacher #1, it is doubtful capacity was improved that much, and whatever increase in capacity they did bring to the work, it did not increase overall adoption of the ORPP model at JHS.

***Level of Commitment and Engagement of Cottonwood High School (CHS) and The ORPP Model.*** While CHS was not necessarily an appropriate fit for the ORPP model and its

process outputs because of its high graduation rate and established dual credit program, those same process outputs were feasible in that they could have been enacted and utilized by school staff, though questions remain about how much chance those efforts by ORPP had in improving overall outcomes. While the CHS Principal #1 pretty much passed on all responsibility of the partnership on to Lead Teacher #1, this teacher was very committed and engaged in the ORPP model, particularly in working to develop and deliver teacher professional development and working within the ORPP model to ensure RBPs were a core part of that PD content.

Though the CHS Lead Teacher #1 made independent progress in the delivery of ORPP-supported PD meant to address the perceived lack of student engagement, within their school and district, they were essentially working on this in isolation. CHS Principal #1 had no interest in collaborating, and did not see a role for themselves in the ORPP model as previously detailed in the CHS Case-Study synopsis. Again, this is a familiar message that, in part, helped lead to the identified theme of a lack of role clarity and connection to school partner administration. Similarly, the work CHS Lead Teacher #1 was undertaking was also disconnected to the school districts vision and mission, another identified theme stemming from the thematic analysis completed earlier. What this meant was that, this isolated work, while Lead Teacher #1 was certainly committed and engaged in the work, was not really adopted at the administrative level, or beyond and above at the district level. Though out of the scope for this project because it goes beyond the two and a half years under examination, the consequence was that when Lead Teacher #1 left their position at CHS in the 2019-2020 school year and were replaced by another lead teacher, their entire PD program was scrapped in favor of a district mandated focus on 9<sup>th</sup> grade on track and grade level data teams for professional development time.

Examination of the CHS teacher survey data from the fall of 2019 supports the idea that professional development was going well, though it did not last long enough with personnel changes and the move to online school, to be able to further collect enough data to try and determine the influence it may have had on teacher and student outcomes. Of the 20 CHS teachers who completed the teacher perception survey (100% of teachers at CHS), 75% identified a total of 2 or 3 PD topics, and all respondents correctly identified one or more of the three total topics: student engagement strategies, project-based learning, and Google Applications for Education. When asked if the PD was useful, 90% either agreed or strongly agreed that it was, with only 10% (two teachers) saying that they somewhat disagreed. When asked if the PD leader was knowledgeable and helpful, 45% strongly agreed and 55% agreed.

When it comes to looking at both the CHS Principal #1 and the Lead Teacher #1, it is evident that the principal was not at all committed to or engaged in the ORPP and that the Lead Teacher #1 was very much committed and engaged in improvement efforts aligned with the ORPP process outputs. Though it should be said again, questions will remain as to how this commitment and engagement from the Lead Teacher #1 was going to ultimately improve student outcomes at CHS. It is possible that the RBPs being incorporated into the ORPP-supported PD could have eventually helped a number of students remain at CHS through to graduation instead of volunteering to leave to enroll in the alternative high school.

***Problems of Practice at CHS.*** CHS came to the ORPP with no preconceived notions of what their problems of practice were, let alone ones they had already identified as an area to aim improvement work at. The CHS Lead Teacher #1 did a great job adopting the ORPP Improvement Model, including its data collection and examination processes to identify their problem of practice. Ultimately, Lead Teacher #1 settled on the growing number of CHS



students voluntarily leaving to enroll in the local alternative high school because it was where the ORPP model led them. At the point a decision was made to focus on this problem, it was not on the radar of CHS administration and district leadership as an active problem within the school.

***Transfer of Knowledge at CHS.*** Once the problem of practice was identified at CHS, the Lead Teacher #1 worked through the ORPP model with ORPP staff to bring research-based practices into their professional development curriculum. It is unfortunate the PD delivery model at CHS could not have been studied for a longer period of time with Lead Teacher #1 at the helm, and a longer sustained period of implementation prior to the COVID pandemic and shift to online virtual school forcing an immediate shift in PD for teachers to learn how to teach online.

***Increasing Improvement Capacity at CHS.*** Again, CHS Lead Teacher #1, and the time they had to work within the ORPP model, certainly increased improvement capacity at CHS. As CHS Principal #1 stated in the semi-structured interview with them, this PD was the best they had had at CHS in a long time. However, Principal #1 themselves had no role in the ORPP, and essentially added nothing to the improvement capacity at CHS. In addition, because of the high graduation rate and established dual credit program at CHS, there is some doubt as to how much the ORPP model and its process outputs would have led to increased improvement in graduation rates in particular, considering this was its primary goal.

***Level of Commitment and Engagement of Redwood High School (RHS) and The ORPP Model.*** RHS was determined to be both an inappropriate fit for the ORPP model, and infeasible for it as well. To recap, RHS had a very high graduation rate (95%), an established dual credit program and a predetermined problem of practice and adopted curriculum to address it. While they were not able to fully adopt the ORPP model because of these factors, they did a very good job in some aspects including the commitment and engagement of both the RHS Lead

Teachers 1 & 2 as well as the RHS Principal #1. Lessons can be learned from how they adopted their roles and responsibilities, even though they were confined by the aforementioned factors.

Of the 42 teachers at RHS in the fall of 2019, all but one participated in the teacher perception survey. Of those participants, 79.6% identified Conscious Discipline (CD) as the primary PD topic so far in that school year. However, no participants strongly agreed that the CD-focused PD was useful. 58.5% agreed it was useful, 29.3% somewhat disagreed about its use, and 12.2% strongly disagreed that it was useful. However, responses noticeably shift when asked about the knowledge and helpfulness of the PD leader (the ORPP Lead Teacher #2 by that time). 19.5% of participants strongly agreed the PD leader was knowledgeable and helpful, 68.3% agreed, 9.8% somewhat disagreed and 2.4% strongly disagreed.

Similar to the examination of the adoption outcome with CHS, RHS really had nowhere to focus the ORPP model efforts in their work except for *how* CD curriculum was delivered. While CHS could at least focus on adopting the ORPP model and RBPs for PD content, RHS really only had the actual delivery methods to focus on regarding the ORPP model and potential inclusion of RBPs into those methods. However, they did this well and as a team with clear roles and responsibilities RHS Principal #1, Lead Teacher #1 and eventually Lead Teacher #2 strongly adopted the ORPP model to do what they could with it in their limited scope.

***Problems of Practice at RHS.*** Early on in the adoption of the ORPP model, the RHS team knew that much of the staff thought negatively about the CS curriculum. Some of the staff, including Lead Teacher #1 had been to CD conference training that previous summer and understood that it had a limited amount of evidence and research behind it, and it was mostly aimed at elementary grades. As detailed above, the fall 2019 gives a glimpse into this feeling. In essence, the RHS problem of practice became how to follow district mandates in implementing

this curriculum school-wide while making it more palatable to school staff. In regards to adopting the ORPP model to make this determination, it was not really used in that way.

***Transfer of Knowledge at RHS.*** The RHS team did adopt the ORPP model for help in investigating potential strategies in implementing a successful CD curriculum across the school, which ultimately took the form of PD delivery of the CD content, and CD lessons created and delivered to students through a common advisory period all students had. The RHS Lead Teacher #2 and Principal #1 were committed and engaged to being as successful as possible in implementing the CD curriculum throughout the school, trying to increase buy-in along the way. While these efforts were not ultimately successful, and the district eventually moved away from the CD curriculum as a whole, there were positive lessons to be learned in the process output of working with school staff to transfer knowledge into schools, particularly around research-based practices for successful PD delivery, and how advisory periods, and the time they contain, can be effectively incorporated into the daily schedule.

***Increasing Improvement Capacity at RHS.*** The RHS team vigorously committed themselves to the partnership and engaged in the time they had because of ORPP sponsorship of 40% of the Lead Teachers time. Before the ORPP model included detailed roles and responsibilities for a partner schools administration, RHS Principal #1 voluntarily took time from their schedule, on a weekly basis, to work with the Lead Teacher on ORPP-supported school wide improvement efforts. This time was regularly used for them to collaborate in the incorporation of RBPs into teacher PD content and advisory period curriculum. Given the opportunity to start this partnership again, this working relationship is the model that all school partners would be expected to adopt.

### ***Level of Commitment and Engagement of Spruce High School (SHS) and The ORPP***

**Model.** SHS was in a position to feasibly enact and utilize the ORPP model and its process outputs as previously detailed. Their graduation rate (71%), similar to that of JHS, was well below the 2017-18 ACGR of 79% for the state of Oregon. While they had a dual credit program established, they had dual credit course needs not being met by their partnership with the local community college. However, they were never ever to fully adopt the ORPP model in a sustained way. Several factors played a role in this lack of full adoption, including ORPP-side challenges in (Identified Theme B) ambiguous goal setting, (Identified Theme C) the ORPP model lacking a requirement for clear alignment with district vision and mission and (Identified Theme D) a lack of defined role clarity in connection to SHS administration.

These faults led to stagnation regarding the efforts of this researcher as Lead Teacher #1, district mandated shifts in focus regarding the problem of practice being addressed as well as the transfer of knowledge during the span of time Lead Teacher #2 was involved, and a lack of connection, commitment and engagement from SHS administration, including Principal #1. The ambiguous goal setting on the part of ORPP, including its own lack of readiness to take on much of this work, lead to a lack of adoption in multiple areas including the transfer of knowledge through dual credit courses as previously detailed and a lack of adoption of the ORPP model as a whole with regard to problem of practice identification and increasing improvement capacity as the SHS partnership, specifically, lacked a cohesive and consistently engaged relationship between the Lead Teachers (1 & 2), the Principal #1 and the ORPP team. This lack of vertical alignment between the ORPP team, lead teachers, SHS administration and district leadership resulted in efforts to address problems of practice being derailed, failed efforts to transfer RBPs

into SHS improvement efforts, and a lack of solid improvement capacity growth as a whole. Overall, SHS

***Problems of Practice at SHS.*** Only in the second year of ORPP model implementation were the processes to identify and address school problems of practice followed at SHS as detailed in the Case-Study Synopsis. Even with Lead Teacher #2 engaging in the ORPP model processes, SHS still lacked true engagement from administration. While this somewhat anemic adoption of the ORPP model was coalescing around the SHS problem of practice, the district mandated a complete shift away from it, highlighting the lack of vertical alignment where district leadership was not connected to the ORPP (in part because the RHS administration was not strongly engaged in it either). Ultimately, the ORPP model was never followed in a sustained way over more than one school year because of ambiguous goals set by ORPP at the start of the partnership, and a lack of role definition and alignment with school administration and district leadership.

***Transfer of Knowledge at SHS.*** SHS was the closest ORPP partner school to transfer knowledge through university-based dual credit coursework. That said, it was still very far away from happening. While one of the early goals of ORPP was to incorporate dual credit into its ORPP model as an example of how the university could transfer knowledge into high schools, these efforts ultimately failed because of too many road blocks and red tape from university leadership. This became an ambiguous goal because ORPP simply lacked its own capacity to make this happen within such a large organization as the Oregon university in question. Yet, we were putting in tremendous effort to try and make it happen on the ground with SHS. During this time, SHS Principal #1 was not overly committed and engaged with this work, which aided in the efforts fizzling out. Linking back to Assertion #4 made earlier, ORPP lacked a system to

bring research-based practices to schools in a meaningful way that they could successfully adopt and implement with ORPP support. While SHS administration could have been more committed and engaged in the efforts to bring a university-based dual credit computer science course to its students, ORPP lacked a clear system to help make this a reality, and ultimately wasted time of both SHS and ORPP staff when the likelihood of it happening was very slim.

Additional efforts to transfer knowledge at SHS, like the failed dual credit efforts, stem in part from a lack of comprehensive adoption of the ORPP model by SHS staff. That said, and as is indicated in both the identified themes from the thematic analysis and the assertions made from it, much of the fault with the lack of adoption comes from the ORPP model itself, and its ambiguous goals, absence of role clarity and the lack of an ample system to transfer knowledge to the schools whether through dual credit, professional development or other mechanism.

***Increasing Improvement Capacity at SHS.*** As indicated earlier, SHS tested the idea of embedding an ORPP staff member (this researcher) at the school itself as the Lead Teacher. This did not work for numerous reasons previously detailed, but mainly because that person lacks connection and buy-in from the school staff and administration. As Lead Teacher #1, I was unable to increase improvement capacity much at all because I lacked the trust and interest of the teaching staff to become involved in their on-going improvement efforts. Lead Teacher #2 was able to increase improvement capacity somewhat, but not in a sustained enough way to show any real measurable improvement in any area SHS was working in.

**Commitment and Engagement to Any Improvement System is About More Than Just Signing Up.** The proximal implementation outcome of adoption goes well beyond just signing up to a partnership and broadly agreeing to its goals. For ORPP, like one can assume all Research-Practice Partnerships hope for, adoption means working towards sustained

commitment and engagement with the partnership and its overarching goals at all levels from district leadership on down to the teaching staff. Unfortunately, in most ways that mattered, the ORPP model failed to sustain school partner commitment and engagement. As demonstrated, none of the ORPP-partner schools had adopted the ORPP model to a moderate or higher degree. They all, in their own unique ways, adopted different aspects of the ORPP model in lesser ways. One can possibly argue that improvements to the model and clarified goals leading up to the 2020-21 school year were helping to improve sustained partner engagement and commitment at all levels of the school and district. However, the COVID pandemic in conjunction with the transitioning of in-person instruction to online virtual school meant many of those improvements to the ORPP model were not measured beyond the 2020-2021 school year, and that measures that were planned for the end of the 2020-21 school year were dropped.

There are lessons to be learned, however, when the reasons behind a lack of broad and sustained adoption of the ORPP model are examined. Many of the lessons are directly linked to the previously detailed identified themes and assertions made, both part of the thematic analysis undertaken for this project. Assertion #4, which states that the ORPP program lacked a clear system to bring research-based practices to schools in a meaningful way is central to these lessons learned. In multiple cases, including the failed efforts to establish a dual credit computer science course at SHS, the lack of this system stymied improvement efforts. Future partnerships similar to ORPP will ideally ensure a system to help transfer knowledge is firmly in place prior to starting work with partner schools. The opinion of this researcher is that school staff are incredibly busy, and if the partnership cannot be immediately engaged and progress quickly made, the likelihood of its success is going to suffer.

Assertions #2 and #3 emphasize that ORPP lacked clear roles for administration (#2) and lacked an improvement model that was connected to partner districts visions and goals (#3). In conjunction, the lack of these two components within the ORPP model itself often meant that the Lead Teacher was working in isolation within their schools and only connected to any sort of network through ORPP and the other partner schools. Ideally, future partnerships include clear details on the roles for all involved, particularly including school administration, and that part of the process for identifying school-based problems of practice align with district vision and goals.

Implementing these changes in any related partnership model will help to align and vertically connect the work started by the Lead Teacher (and supported by the university-side staff) up through the schools' administration and on to the district level. Having the school administration, who are the main communication conduits to district leadership, fully committed and engaged with the improvement model will help ensure that the work is sustained by regularly mediating and realigning any shifts in district value and goals with the ongoing improvement work at the school level. District leadership will also be more regularly informed and aware of improvement work at the school level with regular vertical alignment efforts.

**Research Question #4 - How has each ORPP-partner school differed in their perception of overall acceptability of the partnership from inception through to May, 2020?** Acceptability was previously defined as the extent to which partner schools perceived the overall partnership to be satisfactory and that the ORPP process outputs were adequate and beneficial to the school. At no point in this research project was the mistake of removing individual school identifiers during the Directed Content Analysis to anonymize them more limiting than in working to answering the fourth research question. At the beginning of this project the intention was to examine the differences in how each school accepted the ORPP



through email communication. It could have been very beneficial to be able to compare the frequency of the randomly selected emails that contained text indicating communications on acceptability. Unfortunately, this can no longer be done. However, after the DCA was completed the acceptability outcome only accounted for 25.3% (40 coded examples total) of the 158 total emails that included communication related to the proximal implementation outcomes.

Of those, 84.6% (33 of 40) concerned increasing school improvement capacity, which as previously detailed includes the logistics of the Lead Teachers contract, scheduling, invoicing etc. In other words, there ended up being very little evidence in email communication about how the partners felt regarding the ORPP project as a whole, and so attempting to compare those communications across all four schools would have most likely resulted in little to no additional insight. The DCA of ORPP-related work documents tells a similar story, in that only three of the 87 randomly samples documents included any reference to partner acceptability of the ORPP project, and all of them related to increasing school improvement. Those three documents all related to contractual or role definition information for the lead teachers.

Looking backwards at the original planning for this research project, it may have been a misstep in hoping to see much communication regarding the acceptability of the ORPP within the scope of the early implementation from September, 2017 to May 31, 2020 when the partnership continued on well beyond this time frame. This is particularly true when the last part of this time period, starting in late March and early April of 2020, partner schools were making the fast and tumultuous transition to online virtual schooling.

Not being able to rely as much on the DCA results to help answer the fourth research question regarding acceptability, greater emphasis has to be placed on results from the

semi-structured interviews and frequency analysis of the fall 2019 survey data where school partners were asked about their perceptions on the value of ORPP-supported PD.

***Perceived Acceptability of the ORPP from Juniper High School (JHS).*** Along with Spruce High School, JHS likely had the most to gain from the ORPP and its offered improvement model. As established, it had a lower graduation rate than the state average, a sluggish dual credit program, and room for improvement in its professional development structure. What ORPP was offering could have feasibly been strongly adopted, if it had been more primed and well-equipped to help do so. In examining both the teacher survey data and the semi-structured interviews for JHS as they pertained to the overall acceptability of the ORPP model, they both lead to the conclusion that ORPP had a low level of perceived acceptability and was not as beneficial as it could have been.

***Teacher Perceptions of ORPP-Supported PD.*** When JHS staff were asked about their perceived favorability of ORPP-supported PD the results were not overwhelmingly positive as detailed previously in Table 9 and Table 10. With such a small sample size, there is no real purpose in trying to compare any small differences between JHS results and the four-school combined averages. What is noticeable here is that the rates for JHS (and the four-school averages) for those that strongly agreed that they liked the PD, thought their time was well spent and that the PD was useful is low compared to what one wants to see. This is particularly true when one considers that at JHS, like most cases across the entire partnership, during the timeframe under examination the majority of the ORPP-supported improvement efforts were centered on helping the lead teachers develop research-based professional development around their given problems of practice. For example, 52% of JHS survey participants somewhat disagreed or strongly disagreed that their time [in PD] was well spent.

While the definition of acceptability for this project states that it is interested in how ‘ORPP partner school team members’ perceive the partnership and not the teacher recipients of the PD itself, Proctor et al. (2011) state that acceptability, “should be assessed based on the stakeholder’s knowledge of or direct experience with various dimensions of the treatment to be implemented, such as its content, complexity, or comfort” (p. 67). The connection between the teacher perceptions of ORPP-supported PD and the acceptability of those that delivered it may be tenuous at first glance. However, based on this researcher’s lengthy, direct and repetitive experience of working with those lead teachers to develop the PD and often debriefing after it was delivered, the impression and response of the lead teachers after the PD was delivered very closely reflects what the frequency analysis of the survey data indicates. In short, the PD was not overly well received, likely did little to progress the improvement efforts in most cases, and the lead teachers were often well aware of that. So, the connection between teacher perception data for PD, a main driver of the ORPP process outputs, and the perceived value of the ORPP model by the lead teachers themselves is immediate.

*Semi-Structured Interviews with Juniper High School Staff.* Insights from the semi-structured interviews with both the JHS Principal #1 and the Lead Teacher #1 support the tenuous level of acceptability they had on the overall ORPP model. As quoted previously, the JHS Principal #1 was generally confused on the nature of the project, in which the ‘early buckets of work’ that were initially discussed early on in the project, never materialized. They went on to state that the lead teacher shifted the overall scope of work [it is inferred here that this was done without communicating this shift with this principal] to the point where, “some of it was useful, but other work was confusing and I did not know how it was going to translate across the entire

building... or what my role was as a principal” (Juniper High School Principal #1, personal communication, February 11, 2022).

During the semi-structured interview, JHS Principal #1 also discussed their displeasure with the ORPP project as shortly after it started, as they felt JHS Lead Teacher #1 was recruited by ORPP to become a full-time doctoral student at the university in question. JHS Principal #1 was upset about this as it forced them to have to personally juggle absences by Lead Teacher #1 and requested time off from JHS and ORPP duties to pursue doctoral work (Juniper High School Principal #1, personal communication, February 11, 2022). JHS Principal #1 said they voiced this confusion and frustration with ORPP leadership who responded, in the principal’s words, by stating that ORPP was, “kind of creating this in real time and that... some things have changed or that [ORPP] is making some adjustments” (Juniper High School Principal #1, personal communication, February 11, 2022). Ultimately, JHS Principal #1 summed up their poor level of acceptability of the ORPP model itself by stating that, “...in retrospect it was like trying to get two different operating system to try and talk to one another... K12 is so different than how a university functions, [ORPP] needed a clearer framework and theory of action – a more concrete set of guiding principles. It is a conceptually interesting idea, but in my experience new partnerships like [ORPP] often underestimate how difficult the work would be” (Juniper High School Principal #1, personal communication, February 11, 2022).

The semi-structured interview with JHS Lead Teacher #1 reiterated many of the sentiments Principal #1 had on the shifting goals laid out early on (e.g. the goal of heading up a recruitment pipeline to the university for students of color to a new goal where they were taking the lead on ORPP-supported PD). Once settled, they looked favorably on the ORPP model, but admit they ultimately recognized that the direction they took the work was beyond the JHS-

specific goals and ultimately led them to form a community organization outside of JHS and its parent school district where they were able to work with youth who had experienced trauma (Juniper High School Lead Teacher #1, personal communication, February 18, 2022). When asked about their impressions of what the communication was like within the ORPP they stated that they, “Had no issues with communication, don’t remember any problems getting info, or resources. [They] felt supported” (Juniper High School Lead Teacher #1, personal communication, February 18, 2022). But, in a telling moment they also recalled the entire ORPP improvement model as a time when, “... we were asked to fill in a lot of information in a sort of form... and I don’t recall what happened to all of that” (Juniper High School Lead Teacher #1, personal communication, February 18, 2022). Clearly, the JHS Lead Teacher #1 did not invest enough time and energy into working through the ORPP improvement model documentation and processes to feel it was a beneficial component of the improvement work going on at JHS.

Overall, and in different ways, both the JHS Principal #1 and Lead Teacher #1 acknowledged low levels of acceptability for the ORPP model as a whole. While they both recognized there were positive aspects of the ORPP model, and believe original intentions were good, it is also clear that they perceived the partnership to be of insufficient power to reach its own goals.

*Perceived Acceptability of the ORPP from Cottonwood High School (CHS).* As previously indicated, the ORPP model was to be considered scarcely feasible for CHS and that it had a low level of adoption regarding the model itself and its three process outputs. Again, it had a high graduation rate (93%) compared to the state average in the 2017-18 school year (79%). It also had a robust dual credit program established and so lacked immediate needs in those areas that ORPP could feasibly work to improve. That said, as previously detailed, there were areas of

need where the ORPP model was able to gain some traction in its efforts to help CHS improve student outcomes, namely keeping students at the high school through graduation instead of voluntarily leaving to the area alternative school.

In examining both the teacher survey data and the semi-structured interviews for CHS as they pertained to the overall acceptability of the ORPP model, they both lead to the conclusion that the ORPP model was accepted more at CHS than at other partner schools. If progress in the established improvement areas could have been sustained longer, it is possible that this increased level of perceived acceptability could have helped to strengthen the overall adoption of the ORPP model, which could have led to improved ORPP-supported process outputs and, eventually improved student outcomes, namely fewer students leaving to the alternative school.

***Teacher Perceptions of ORPP-Supported PD.*** CHS staff were asked about their perceived favorability of ORPP-supported PD and, as detailed previously in Table 9 and Table 10, results were considerably stronger than the other partner schools. Of the total fall 2019 survey sample (n = 120), CHS participants made up 16.7% of the total (20 out of 120). These 20 respondents did account for 100% of the available CHS teaching staff, as one teacher was out on long-term leave.

While this is a small sample size to make comparisons with, it is difficult to ignore the differences in survey responses between CHS and the average of the four combined schools, *which includes CHS itself*. For example, of the 20 CHS respondents, 25% strongly agreed when asked if they liked the ORPP-supported PD. For the same question, all schools combined averaged 5% who said they strongly agreed. However, if you calculate the average across the other three schools, not including the CHS input, one finds that only 1.33% of total respondents said they strongly agreed when asked if they liked the PD. This trend is relatively consistent

when CHS teacher perception survey data is compared to the four-school average as indicated in Table 9 above. Despite its inappropriate selection as an original ORPP partner, and the ORPP model being nearly infeasible for reasons already detailed, the CHS Lead Teacher #1 did a good job in working to adopt the ORPP model in determining the school's problem of practice, and worked closely with ORPP leadership in sourcing RBPs for use in the professional development for CHS teachers.

The case was made previously for the strong connection between teacher perception survey data and the lead teachers' level of acceptability (be it high or low) for the ORPP model. While that connection for JHS meant a low level of acceptability, in the case of CHS, for at least the lead teacher, it should be associated with a higher level of acceptability. Again, leveraging my own experience working with CHS, and CHS Lead Teacher #1, their direct and sustained engagement with the ORPP model and more broadly the ORPP team, they certainly perceived the partnership as highly acceptable and beneficial to the school as a whole.

***Semi-Structured Interviews with Cottonwood High School Staff.*** While insights from the semi-structured interview with Lead Teacher #1 certainly strengthen the argument that they were individually very satisfied with the ORPP model, CHS Principal #1 was so removed and disconnected from regular ORPP efforts, interpreting their level of acceptability is more challenging. Lead Teacher #1 had mixed feelings right away when it came to the potential benefit the ORPP model brought to CHS. When asked about the initial ORPP model implementation at CHS, they were excited that it may eventually help develop a cohesive teacher PD plan, that eventually may even spread behind the high school alone. On the other hand, they were worried about the request of incorporating university-based dual credit into CHS as they

already had an established program with a local community college (Cottonwood High School Lead Teacher #1, personal communication, March 10, 2022).

The CHS Lead Teacher #1 also recalls being genuinely excited about the prospect of, “... working with the university to design a playbook that would help guide our school into what we needed to work on with our staff. I feel like I thought it had to be about PD, but thinking about it maybe that’s just what I wanted to hear and pushed in that direction because I was excited about it” (Cottonwood High School Lead Teacher #1, personal communication, March 10, 2022).

As previously detailed in the CHS Case-Study Synopsis, CHS Principal #1 was not so accepting of the ORPP model, or best was indifferent to it. They were mostly concerned with scheduling logistics when the CHS Lead Teacher #1 was required by the partnership to use 40% of their scheduled teaching day working within the ORPP model on school improvement efforts. Like the initial reaction from CHS Lead Teacher #1, they were also concerned with how university-based dual credit was going to interact with the long-standing robust dual credit partnership they had with the local community college. However, they had positive things to say about the PD that was developed through the ORPP model, which does indicate they saw some benefits from the project overall (Cottonwood High School Principal #1, personal communication, March 24, 2022). One specific quote from the CHS Principal really sums up their overall attitude regarding their perspective on the acceptability of the ORPP model. Though rambling at times, they stated that, “... any funding that comes to the district is good for the district, right? ... When it comes down to it, I don’t care about [the university in question] or ORPP that much... I just want to know really what [the project] means, kind of boots on the ground, and if it wouldn't have been for Lead Teacher #1, and subsequently Lead Teacher #2, if it would have been the wrong person in that role, this whole thing would not have worked



because, because I was only going to support it up to the point where I had someone that could pull [the project work] off in the right way” (Cottonwood High School Principal #1, personal communication, March 24, 2022).

***Perceived Acceptability of the ORPP from Redwood High School (RHS).*** RHS was the only school out of the partnership where the ORPP model should have been determined to be an inappropriate fit prior to the start and that was determined to be an infeasible fit after the partnership had begun. It had the highest graduation rate out of any partner school in the 2017-2018 school year (95%) and is had a robust long-standing dual credit program with the local community college. In addition, the district had also bought into a curriculum that was to help address the social emotional needs of its students across the entire spectrum of K12 education in the district. This curriculum was to be the major focus of improvement efforts and professional development within the district for the near future. On its face, it lacked any real immediate needs that the ORPP model could have addressed regarding work to improve the graduation rate. Previously, the rate of adoption of the ORPP model at RHS was determined to be low, although there were some positive aspects of their adoption which included the work relationship and roles that RHS Principal #1 and Lead Teachers #1 & #2 demonstrated.

Looking at the RHS teacher survey data and the results of the semi-structured interviews as they related to the acceptability of the ORPP model there is an argument to be made that the RHS team itself, putting aside the district choice to implement the CD curriculum district wide, was very accepting of it what it offered them.

***Teacher Perceptions of ORPP-Supported PD.*** By the fall of 2019, when RHS teachers participated in the ORPP teacher PD survey, they had been working with the Conscious Discipline (CD) curriculum for at least two year. They sent a pretty clear message, that as a staff,

they were not hugely in favor of it, and generally felt that the curriculum was made more for elementary school teachers. As detailed, the CD curriculum was not a choice made through the ORPP model, but the RHS staff working within the ORPP model were helping to train staff on the curriculum and working to embed it within the school.

Of the total fall 2019 survey sample (n = 120), RHS participants made up 34.2% of the total (41 out of 120). These 41 respondents accounted for 98% of the teaching staff at RHS.

While again noting the small sample size of the survey data collection, it is difficult not to notice that, when asked about their own perceived appreciation on the ORPP-supported PD, no RHS teachers strongly agreed that they liked the PD, thought their time was well spent, or thought the PD was useful to them. Otherwise, the rest of the RHS data compares similarly to the four-school combined averages. Looking more deeply at the survey results, particularly some of the open-ended responses, provides additional insight. These responses have not been detailed in this work until now. One example from an RHS teacher regarding their feelings on the CD curriculum, one which embodies numerous other similar sentiments from the survey data, stated that the district office, "... decided that [all schools] would be doing conscious discipline so we fall in line though it really misses the mark concerning the purpose of this original grant." The grant they are referring to was a small local grant which helped pay for the relatively expensive CD training and curriculum. Several RHS teachers, including Lead Teacher #1 and #2 went to summer conferences to be trained as CD trainers. Another direct quote from the survey data, which also reflects similar sentiments across the response data stated that, "... while [I] appreciate the focus on conscious discipline I found the PD aligned to younger students and difficult to apply in a secondary setting." As previously argued, the teacher perception data from the Fall 2019 survey, while not a direct indicator of the acceptability by RHS staff working within the ORPP, that data

is a direct result of their work with that staff and so, if the teachers on the receiving end of the PD do not value it, then it stands to reason that the lead teachers and administrators involved in the ORPP are going to find it less acceptable as improving PD was one of the main driving efforts of the model.

*Semi-Structured Interviews with Redwood High School Staff.* Unlike other ORPP partner schools, RHS had two different teachers who worked within the model in the Lead Teacher role. In addition to RHS Principal #1, both lead teachers provided much insight into the overall acceptability of the ORPP model during the semi-structured interviews.

RHS Principal #1, like other partner administrators was not involved at all in the decision to add the school they were leading to the ORPP. In the case of RHS, Principal #1 was hired in the summer heading into the first full year of ORPP implementation and was essentially handed the partnership. When they knew who was leading ORPP at the time, and once they knew the professionalism and experience of the current RHS Lead Teacher, they were all on board. Though they admittedly knew next to nothing about the actual ORPP model (Redwood High School Principal #1, personal communication, February 18, 2022). They recalled that the CD curriculum was a hard sell to staff, particularly those who had ‘advanced kids’ (e.g. those taking AP or dual credit courses, etc.). But, they also favorably recalled working with RHS Lead Teacher #1 on trying to ingratiate the CD curriculum into staff PD that was purposefully meant to break down long existing silos between departments. They also came to very much appreciate the time having the Lead Teacher afforded them in working to develop a new PD system that brought staff together more stating that, “We did not want fence sitters. I knew the content [CD] was not ideal but we wanted to bring staff together for relationship building and this almost became the most important aspect of the professional development” (Redwood High School

Principal #1, personal communication, February 18, 2022). They went on to state that, “What was working really well was having somebody [meaning the Lead Teachers #1 & #2] who had the time and resources to create quality PD. They had the resources through [ORPP]” (Redwood High School Principal #1, personal communication, February 18, 2022). Maybe most importantly, RHS Principal #1 reflected on the disconnected feeling that sometimes arose between the ORPP model and district mandates, “Sometimes [we] felt torn by... I wish we could have stayed a bit more aligned with the ORPP model. [Lead Teacher #2] did a really good job aligning ORPP and what the district wanted. Sometimes I felt like the district was telling [us] to do one thing, and the data from ORPP was telling us to do another” (Redwood High School Principal #1, personal communication, February 18, 2022).

Comparing the interview transcripts and notes from RHS Lead Teacher #1 and Lead Teacher #2, and looking for content related to the acceptability implementation outcome, it becomes clear what different systems and partnerships they took part in. Meaning, Lead Teacher #1 was there from day 1, at the ground level and had to deal with all of the ambiguity. They were helping to build an improvement model, while simultaneously trying to implement those improvement efforts in their school. One example is where Lead Teacher recalled the early partnership and stated that,

“... for me it felt very much like never really knowing what we were you know, where we were going. I think one of the things that helps humans, especially in the teaching profession is that when they have a known content structure and the structure was fine it's just that it... to me it felt a lot like I never knew what it was that we were going to necessarily be doing until we developed it ourselves” (Redwood High School Lead Teacher #1, personal communication, December 22, 2021).

In contrast, Lead Teacher #2 felt the ORPP model was more established and felt better about its direction,

It was great to have this document created [e.g. The ORPP Improvement Model] that could be taken to a school and like... Okay, you are noticing or you want to figure out what's not working well and what is working well and having a document with this data for the teams [e.g. administration and school leadership teams] to have this... a game plan or a format for them to kind of go through and analyze and evaluate what's working and what's not and then collectively come up with a plan of action and the steps that it's going to take for them to achieve it. And then, knowing that it's not going to be done or completed necessarily within a year, like you're not going to achieve the goals but you're going to figure out a plan of action over a time period, and so the document was kind of a roadmap to get to that end results ultimately. We just never got to finish it because [of COVID]" (Redwood High School Lead Teacher #2, personal communication, December 14, 2021).

As detailed numerous times at this point, the partnership experience with RHS highlighted the strength of the ORPP model regarding what could be done with the 40% time the Lead Teacher had to work with administration and other school leaders in areas of whole-school improvement. By the time the 2019-2020 school year rolled around, the ORPP model had been in development for almost two years, and was becoming a legitimate tool to help schools determine, design and implement their own improvement efforts. It is unfortunate that those efforts, and much of data that was to be collected was railroaded by the COVID pandemic, and the subsequent move to online school for all partners involved. However, it is clear from the point of view of the RHS administrator and lead teachers who were interviewed for this project, that there was a lot of the ORPP model and partnership they found satisfactory and beneficial. If the teacher survey responses can be separated from the interview feedback from actual ORPP partner team members, particularly because the determination to use CD curriculum was not a choice made by RHS staff, it appears that the ORPP model was very accepted by the RHS team, particularly as the model was refined. Though the ORPP model itself was deemed an inappropriate fit for RHS because of their high graduation rate etc., and an infeasible partner for its process outputs generally, the school partners who worked with ORPP were certainly

accepting of the time and opportunity it gave them to work on improvement efforts in their school.

***Perceived Acceptability of the ORPP from Spruce High School (SHS).*** As with Juniper High School, the ORPP model was found to be both an appropriate fit for SHS and a feasible fit once work began in the fall of 2017. The needs of SHS, primarily its need to improve its graduation rate, were well matched with the process outputs the ORPP model was offering. In examining both the teacher survey data and the semi-structured interviews for SHS as they pertained to the overall acceptability of the ORPP model, they both lead to the conclusion that the ORPP model was accepted more at SHS than at other partner schools.

***Teacher Perceptions of ORPP-Supported PD.*** SHS staff were asked about their perceived favorability of ORPP-supported PD and, as indicated previously in Table 9 and Table 10, results were generally lower than the four-school average. Of the total fall 2019 survey sample (n = 120), SHS participants made up 34.2% of the total (41 out of 120). These 41 respondents accounted for 91.1% of the available SHS teaching staff. Table 22 below includes SHS responses to relevant questions, along with the four-school average of the same questions for comparison.

When SHS respondents were asked if they liked the ORPP-supported PD, more than half (52.9%) disagreed or strongly disagreed with the statement. When the other three schools' average responses are compared, only 16.25% of participants said they disagreed or strongly disagreed when asked if they liked the PD. When SHS staff were asked if their time was well spent, 29.4% responded that they strongly disagreed. The next closest school, JHS, indicated that 16% of their staff strongly disagreed when asked if their time [in PD] was well spent. When SHS

staff were asked if the PD was useful and if the PD leader was knowledgeable and helpful, the results indicate similarly poor results.

Survey data, collected in the fall of 2019, was over a year after SHS Lead Teacher #1 (this researcher) was replaced with Lead Teacher #2 and, as such, that personnel shift should not have disrupted any professional development delivery. As detailed previously, Lead Teacher #1 was not really allowed (this may be too strong of a word) to work with the staff much, let alone lead whole school PD.

To understand where some of the negative response came from, examining the open-ended responses from the raw survey data collection was helpful. Two types of open responses were very common. The first group of common comments were about how many felt that the PD was not teaching them anything new, not enhancing skill. One comment encapsulates this sentiment well. "My knowledge and skills have not been enhanced much. I have been teaching English for 29 years, so I'm pretty "developed." We need more time as a team for working on developing and revising IB curriculum, rather than for the grade level PLCs as they've been implemented this year." There were seven comments that fell into this category. Of the 41 total SHS respondents, this accounted for 17.0% of them. The second group of common comments were about the sentiment that the grade level PLC PD content was not specialized enough for their teaching roles. Some examples of that sentiment include, "I haven't felt like the PD is relevant to my current position given that I am no longer teaching in a classroom setting," and "It is difficult when I am one of one teaching an "island" class. There are no teachers to collaborate in my school, so I collaborate with other World Language teachers outside of [SHS]."

***Semi-Structured Interviews with Juniper High School Staff.*** While SHS Principal #1 was initially accepting of the project because of their knowledge and relationship with the ORPP

Director, their initial feeling on the scope of the ORPP model itself was that it was too vague and too broad. Though they felt the heart of the project was in the right place, they also stated that, “[The university in question] was late to the dual credit game, and was barking up the wrong tree” (Spruce High School Principal #1, personal communication, January 12, 2022). Early on, SHS Principal #1 was very accepting and excited about the partnership, as they thought about it as having a “thought partner” to work on professional development with as they were spread too thin (Spruce High School Principal #1, personal communication, January 12, 2022). In retrospect, this early attitude is good insight into why, as Lead Teacher #1, I was working directly with the principal and no other staff leadership teams. This work did lead to some early interesting documents produced that were working towards creating PD around engagement strategies and the classroom observation data collection form, which never really came to fruition.

Ultimately, the SHS Principal #1 perceived the ORPP model to be satisfactory in that it had beneficial aspects to it that SHS could work into their whole school system. At the time, SHS Principal #1 was, “dismantling some of the systems that gave administrative decisions over to a small group of teachers... and [so I] repositioned some of those roles. The same six or so staff, the same teachers had too much leadership distributed to them through decisions made long before I came to [SHS]” (Spruce High School Principal #1, personal communication, January 12, 2022). SHS Principal #1 went on to explain that, “... I saw [the ORPP model] as being able to eventually help re-establish, establish I mean, new systems that would be more equitable for the whole staff. I wanted to distribute more of it across [SHS]. ORPP would have, I saw, would have been able to help with creating those new frameworks for it” (Spruce High School Principal #1,



personal communication, January 12, 2022). Unfortunately, as has been detailed, those intentions never came to fruition because of a lack of strong adoption for numerous reasons.

Lead Teacher #2 had a much more frustrating experience dealing with the development of the ORPP Improvement Model and the development challenges that came with it. These challenges were compounded by a slow shift in administration towards the end of the 2019-2020 school year, where SHS Principal #1 was on their way out, and an interim administrator was taking over the day-to-day running of the school, though they had nothing to do with the ORPP project, as SHS Principal #1 remained officially in their position (Spruce High School Lead Teacher #2, personal communication, December 21, 2021).

The SHS Lead Teacher #2 felt that the ORPP model was at odds with other improvement work in the school, “[My role] was positioned in a way that three or four other teachers in the building were already doing improvement work with the [administration] and I could not understand how ORPP could formally operationalize in this role” (Spruce High School Lead Teacher #2, personal communication, December 21, 2021). They went on to say that, “Our administration had an interest in using the [ORPP model] data collection system... and that it would be a great way to apply this work. This was at a time when there was a lot of inconsistency in the building, in the staff, and we were all looking for more input from [administration] to help with the direction of the school, but it just never happened and [ORPP] was really just put to the side” (Spruce High School Lead Teacher #2, personal communication, December 21, 2021).

Ultimately, SHS Lead Teacher #2 felt that the administration, including SHS Principal #1, were just bogged down with putting out fires (e.g. challenges with staff and students) day to day, and never got traction in creating a long-term vision, which the ORPP model could have

helped create and solidify in their opinion (Spruce High School Lead Teacher #2, personal communication, December 21, 2021). While it appears SHS Lead Teacher #2 *wanted* to find the ORPP model acceptable, it was not adequate enough to benefit SHS as a whole, and was not able to be beneficial enough to them to really be adopted to a high enough degree to make any measurable difference.

## CHAPTER VI

### DISCUSSION

#### Summary

Stake (2006) defines a ‘quintain’ as the object or phenomenon to be studied. With regards to a multiple case study, the author refers to it as a ‘target collection’. For this project, while the target collection was the four separate ORPP high school partners, what is really more broadly under examination is the network itself, implemented with those four separate partners together. In other words, the quintain of this study is the act of implementing the strategies (i.e., the process outputs) of the ORPP model across four Oregon high schools. Did ORPP, as leader and organizer of the network, implement its strategies successfully with each partner school? What went right and wrong in those efforts? What can be learned from the efforts that took place from September 01, 2017 to May 31, 2020? The current study examined the implementation of ORPP to draw lessons for future school-university research partnerships. Results indicated serious shortcomings in the implementation of the ORPP model, but also revealed insights that can improve ORPP implementation in years to come, as well as RPP efforts more broadly.

As previously detailed, the original ORPP model was not an ideally appropriate fit for any of the four partner schools. This was particularly true for both Cottonwood High School and Redwood High School because of their very high graduation rates prior to implementation of the ORPP model and because of their extensive dual credit programs with local community colleges. Schools were identified because of geographic spread across Oregon and because of a presumed lack of existing relationship with the Oregon university in question. No assessment for need or readiness was determined prior to school partners being added. This lack of assessment also meant a lack of understanding for what partner school’s improvement needs were and failed to

recognize that in numerous ways they already had similar improvement efforts underway (e.g. Conscious Discipline curriculum at RHS).

The feasibility of the ORPP model, how well it could have been successfully enacted and utilized with partner schools, was weak at the outset. While, as previously detailed, the ORPP model was more feasible with some school partners than others (e.g. Juniper High School), it was more likely than not going to fail to make any measurable improvements in student outcomes as it was first implemented. In part, this was due to unclear and ambiguous goal setting and role clarity at the start of the ORPP. Having clearly defined roles within teams trying to implement new practices and / or innovations is important, as has been shown in an array of different fields, including business (Nah, Zuckweiler & Lee-Shang Lau, 2003), construction management (Brady, Tzortzopoulos and Rooke, 2011), and numerous areas within the field of health care (Sangster-Gormley, Martin-Misener, Downe-Wamboldt & DiCenso, 2011; Brown-Johnson et al., 2019; Sampson, Mensah & Narula, 2015). When discussing the creation of education-centered RPPs, Penuel and Gallagher (2017) frequently discuss the importance of defining clear roles and responsibilities for all participants during design and implementation phases, particularly around the division of labor and identification of responsibility for certain tasks within the new partnership. While the role and expectations of the Lead Teacher became more defined throughout the 2017-2018 school year, ORPP lost an opportunity to specifically define the role and expectations of partner-school administrators (e.g. principals and vice principals) and was not able to reverse that outcome during the scope of this study. This likely contributed to lower overall adoption and diminished acceptability, particularly by administration, as became clear during the semi-structured interviews.

Additionally, the lack of an established mechanism for transferring and implementing knowledge (e.g. RBPs) into schools over time was another factor in ORPPs likely long-term inability to help school partners make any measurable improvements in student outcomes, which again resulted in low adoption overall. While some of these deficits were being addressed later on in its early implementation, the COVID 19 pandemic stopped those potential remedies from being realized. As previously discussed, sustained school improvement is a difficult and complicated task, the research to practice gap exists because of this complexity. As Penuel and Gallagher (2017) state, “In a partnership, it is not enough for researchers to communicate findings to their educational partners” (p. 143). The authors go on to explain that a bridge needs to be built over the research to practice gap to allow educator partners to take up and apply concepts from research, adapt research-based tools and use analytical findings from the project in their implementation (2017). Related to this transfer mechanism to bridge the research to practice gap, Bryk, Gomez, Grunow and LeMahieu (2015) discuss the importance of social capital as an important part of easing this transfer mechanism, stating that when partners, “Come to know, respect and trust one another, they are more likely to adopt the innovations of their colleagues and test and refine these innovations in their own contexts” (p. 146). Bryk et al. (2015) go on to explain that these innovations (e.g. the transfer of knowledge in the form of research-based practices) will not likely be implemented with exacting fidelity, but that instead these partnerships need to focus on, “how to adaptively integrate interventions into different contexts if we are to attain improved outcomes reliably” (p. 209). For ORPP, there were likely several complexities that lead to a general breakdown in the transfer of knowledge. These complexities included a lack of available funding mechanism that would allow university partners to spend time in working to bridge this knowledge to practice gap as well as the fact that all partner

schools were identifying their own independent problems of practice which meant that applicable RBPs would need to come from an array of education-related content areas. Again, this meant adoption challenges and may have been one of the biggest factors that contributed to low uptake.

In some ways ORPP partner schools did not differ all that much in their overall adoption of the ORPP model. This is due to the fact that, in large part, all four schools failed to adopt the improvement model to a very high degree. However, both CHS and RHS adopted different aspects of the ORPP model somewhat more successfully than either SHS or JHS. That said, no dual credit courses were ever implemented in any partner school and there is a lack of solid evidence to say that any network partners truly adopted any ORPP-facilitated RBSs for any extended length of time or to any certain level of fidelity. Where partners did show some lower levels of adoption was in how they successfully utilized the Lead Teacher both to work through the ORPP improvement model to identify problems of practice in their schools and to design and deliver professional development (CHS most specifically) thereby indicating some level of adopting aspects of increased school improvement capacity. Yet, as previously detailed, overall teacher perceptions of the ORPP-supported PD indicated poor results across all partner schools, again showing that partner schools did not have a high degree of uptake of the PD content itself. While efforts to address some of these deficits were underway in the last half of 2020, again, they were cut short because of the pandemic. One clear challenge with the ORPP model was that each school identified their own particular problems of practice to address through ORPP-supported PD. While broad ‘best practice’ PD guidelines were offered to partner schools, in addition to further types of PD support, in three of the four examples, teachers were not able to make choices about the PD they partook in and the supported PD was not broken down and differentiated by grade level or content area. Studies into teacher burnout indicate that

professional learning fatigue can take place, in conjunction with the myriad other responsibilities educators have, and this fatigue can become more pronounced over time when they are unable to make decisions for themselves and their own professional progression (Rumschlag, 2017). Research also indicates that teachers need to feel the PD specifically supports their own competence and self-efficacy for their specific content area work (Rumschlag, 2017; Pillay, Goddard & Wilss, 2005; Richards, Hemphill & Templin, 2018). Low uptake and acceptability of the ORPP-supported PD were likely due, in part, to these dynamics in the professional development offered.

DCA results indicated a lack of email communication pertaining to the network partners perceptions of their overall acceptability of the ORPP. This could be due to the truncated end of the 2019-2020 school year that quickly went from in-person instruction to virtual online instruction in a matter of weeks as the COVID 19 pandemic reared its ugly head. However, looking at other indicators detailed throughout this study, including teacher survey data and semi-structured interview results, the general outcome across the network is that the ORPP model was poorly accepted. Save for some positive results with CHS, analysis of survey data essentially indicated that teachers did not perceive the ORPP-supported overly positive, both in how much they did not like it and how they generally did not find it very useful. Semi-structured interviews, particularly with school principals, often aligned with this low level of overall acceptability. While their insights were not overly negative regarding ORPP efforts, they were often disconnected and indistinct, often recalling their uncertainty of the project and any potential progress that was being made.

As discussed previously, the Active Implementation Framework (AIF; Blanchard et al., 2017) includes five framework components, that are meant to help improve the production

efforts of putting an innovation into practice. There are four separate stages within the AIF's implementation stages component (1) exploration, (2) installation, (3) initial development and (4) full implementation. An innovation working through these stages can take anywhere from 2 to 4 years according to Blanchard et al. (2017). The Exploration stage includes; assessing fit, ensuring a usable innovation, the creation of implementation teams, and establishing practice-policy loops. It is helpful to use the AIF to compare and contrast the ORPP model implementation against because examining proper implementation stages, drivers, etc. allows this researcher to see what was missing, what was in place and what mistakes may have been made. It allows for a different more practiced and perfected lens to be used, which can highlight missteps in the design and implementation of the ORPP model.

In the first two and a half years of implementation the ORPP model showed signs of completing some component parts of the first three stages (exploration, installation and initial implementation), but clearly did not meet all included criteria. Regarding the Exploration stage, the fit of school partners, as previously detailed, was not assessed. This led to poor school recruitment. The viability of the ORPP model, as an innovation, was not evaluated prior to implementation. DCA results, as previously described, indicated that very little communication focused on the ORPP model, the innovation, and whether it included a solidly developed plan to be able to transfer university faculty expertise and other RBP knowledge to school partners. This, in part, led to ambiguous goal setting.

The installation stage includes the examination of implementation drivers, the development of practitioner readiness, and the development of fidelity measures. Blanchard et al. (2017) defines drivers as, "Clearly defined infrastructure components [that] are necessary to support the innovation [and] includes organizational support, competency supports for



practitioners, and leadership capacity” (p. 923). Previous analytic results indicated that while infrastructure components for the ORPP model (organizational support in the form of the intergovernmental agreements, financial support for the Lead Teacher time, and a web-based platform to help facilitate work) and leadership capacity were in place, the ORPP model often lacked well-formed competency supports in the form of training and coaching in the ORPP model for both Lead Teachers and school administration, which likely helped contribute to Theme D as the ORPP model lacked role clarity (guidelines and clear deliverables etc.) for both Lead Teachers and school administration. This same line of thought leads this researcher to believe that practitioner (Lead Teacher) readiness training and preparation efforts were unsuccessful, particularly when it came to SHS and JHS. In addition, the ORPP model lacked a clearly developed fidelity measure, particularly early on during the first two years of implementation. It was working towards this goal, but those efforts were thwarted by the COVID pandemic towards the last half of the 2019-2020 school year.

With a lack of these stage components in place, the ORPP network, steered by its leadership including this researcher, in many ways jumped ahead to the third stage of the AIF, initial implementation, before components of both the exploration and installation stages were completed (Blanchard et al., 2017). The initial implementation stage includes four separate components; Initiating improvement cycles, building capacity for implementation drivers, enhancing the practice-policy connection, and assessing fidelity. While the ORPP model included an improvement cycle to help Lead Teachers monitor and improve their own implementation, ORPP as an organization and innovation did not include one. The model and network itself were simply too fluid during this time to really try to assess any fidelity. Efforts were taken to keep Lead Teachers on track with following the ORPP model, to stay faithful to

the steps and processes. However, for many reasons previously detailed, Lead Teachers struggled with this. Whether due to their lack of experience and ability, a lack of engagement from administration or a top-down district mandate to shift to another PD area, there simply was not much traction. Providing financial compensation to districts for the Lead Teacher time to work on ORPP improvement efforts was meant to build capacity for the networks implementation drivers, but looking at analytic results as a whole, working directly with single teachers within an entire school was just not the right model. The importance of vertical alignment (e.g. clear understanding, consensus, agreement and support between the different organizational layers of school improvement efforts) between agents of improvement at the most direct level of improvement (e.g. teachers implementing classroom change efforts), individual school entities and their administrators and then school district leaders and their vision and goals, has shown to be vital for the sustained success of improvement efforts (Cobb, Jackson, Henrick & Smith, 2020; Bryk, Gomez, Grunow & LeMahieu, 2015; Penuel & Gallagher, 2017). Bryk et al. (2015) even go one step further in the idea of vertically aligning improvement efforts by offering that, “School districts, like health-care institutions, would operate quality improvement offices that provide technical staff and support capabilities to all educators in the district” (p. 190). Instead of working primarily working with classroom teachers, ORPP would have likely seen increased levels of both adoption and acceptability if the model would have included clearly articulated roles and expectations for both building administration and district leadership, which could have included regular meetings and ongoing formal input.

In the initial planning of the ORPP model, there was little thought given to the drivers of the model. In hindsight, much more thought and planning should have gone into the development of the ORPP model, including factors that would drive the improvement efforts towards success.

While there was some visible level of organizational support at both the university side and the school partner side of the network, there were never clear roles and expectations setup, particularly when it came to how school administration would need to be involved. As JHS and CHS principals stated during their semi-structured interviews, they simply did not see a role for themselves in the improvement efforts, and ORPP leadership realized the existence of that gap too late. Early plans were being formed in how to approach this issue when, again, the COVID Pandemic forced schools to go online.

### **Limitations**

Mixed methods research brings together qualitative and quantitative analysis in order to create a deeper understanding of the area of interest, where one method alone may not be sufficient to provide as clear and complete a picture as desired. While qualitative data is often believed to provide a greater depth of understanding, and quantitative data is thought to provide a broader understanding of the area of interest, even when combined into a mixed method study, where methods can complement each other, limitations still exist (Creswell & Plano Clark, 2017; Johnson & Onwuegbuzie, 2004). Mixed methods can be complex to plan and operate (Caruth, 2013). The timing of quantitative and qualitative components of the study can become complicated, as can the successful integration of mixed method data with its subsequent analysis and interpretation (Creswell & Plano Clark, 2017; Creswell & Creswell, 2018). Because of these complexities and challenges, it is possible that the integration and interpretation of data throughout the mixed methods process was done poorly, leading to vague or outright mistaken outcomes.

There are numerous limitations with regard to the completed DCA of ORPP-related emails and work documents. As previously detailed, the average intercoder agreement across the

four research questions was  $\alpha = 0.774$ . Krippendorff (2013) suggests drawing tentative conclusions when an intercoder reliability of  $\alpha = .800$  or better is achieved, but states results between  $\alpha = .667$  and  $\alpha = .800$  can be considered. Two research question intercoder agreement alphas were below the .800 threshold, at  $\alpha = .7033$  (RQ1 – Appropriateness of fit) and  $\alpha = .7662$  (RQ2 – Feasibility of fit). While it was decided to move forward with final Directed Content Analysis for this project, alpha results that fall below the .800 threshold indicate that conclusions based on subsequent analysis should bare this limitation in mind. For example, it is possible the DCA outcomes which showed a low number of ORPP-related emails and work documents that pertained to proximal implementation outcomes and ORPP process outputs could, in reality, include higher or lower percentages of email and documents that pertain to ORPP outcomes and outputs.

Another limitation related to DCA findings was a serious mistake this researcher made in too completely anonymizing ORPP-related emails that was previously detailed. Only well after the fact did it come to light that by removing all school-specific identification details in collected and sampled emails it was impossible to seek out any similarities and differences in the frequency of emails coded for proximal implementation outcomes and process outputs *across schools*. Including these identification details would have helped to see potential frequency differences and how those related to other findings, particularly from principal and lead teacher interviews. This particular limitation weakens the ability to analyze school outcomes across cases.

There are limitations of the teacher survey data used for this study. Additional surveys were collected, including one from the spring of 2018, and planned for the spring of 2020. While the Spring 2018 and fall of 2019 surveys have similar content and questions, the 2018 survey

accidentally left out school identifiers, which the 2019 version did. None of the teacher PD survey data collected individually identifies the teachers themselves. These issues make it unreasonable to include any sort of test-retest reliability, and data from the two surveys cannot be compared at all (Christensen, Johnson, & Turner, 2015). This means that it is not feasible to look at the change in teacher attitude and / or perception over time related to ORPP-supported PD in the four schools. The survey data can be used to show a snapshot of how teachers perceived ORPP-supported PD in those moments, but that is all.

In addition, this specific survey has not ever gone through any process validating its ability to measure the construct of how teachers in partner schools perceive the ORPP-supported professional development within their schools. While it was created using existing scholarship on teacher professional development, it is an amalgamation of that literature, and has never been validated as a stand-alone measure. The ORPP-supported PD survey would benefit from a process to measure its criterion validity, comparing survey response data to existing validated surveys measuring the same construct (Christensen, Johnson, & Turner, 2015). However, that process is beyond the scope of this study.

The semi-structured interview questions themselves are likely limited. Though they were based on early findings from the study, they are inherently going to have certain limitations. For example, looking back at the interview results, there was limited inquiry into how the interviewees themselves would have potentially improved the model during early implementation. The continuous improvement cycle of the ORPP model itself should have collected regular input from school partners, and not collecting their reflective insights during this study was also a lost opportunity.

It is near impossible to not bring my own bias into the study. As I am currently employed as the Associate Director of ORPP, this study directly involves “my own backyard” (p. 62) as Creswell (2015) puts it. I will bring preconceived notions of outcomes for the cases involved in the study. Interview responses may be biased, as the interviewees see me as a colleague, instead of a completely independent researcher, and may not be as forthcoming. Cross-case analysis may be potentially biased as I am integrally connected to the people and events that took place within ORPP and the separate partner schools. There are issues of ethics and power involved. Can the examination of the ORPP model and its implementation across the four partner schools reach its natural and honest conclusion (good or bad) while avoiding potentially negative consequences to my position and the continuance of ORPP? Again, the goal is to take an honest look at implementation of ORPP over its first two and a half years in order to improve its future course and, ultimately, its goals of helping schools to improve student outcomes. In this regard, it is worth the potentially negative consequences. Ultimately, the advantages outweigh the disadvantages and it only benefits the ORPP project as a whole to be straightforward.

Some advantages of working in my own backyard include having convenient access to ORPP data (both quantitative and qualitative). Being directly connected to ORPP will also reduce the resource expenditures of the time and effort required to complete this study, and may actually result in better, more detailed and honest data because of the trust and rapport I have with partner schools’ staff. For these reasons, I believe the positives outweigh the negatives.

While the nature of qualitative research can lead to different interpretations by different researchers, I believe that my in-depth personal knowledge of the implementation of ORPP will allow for a deeper and more accurate evaluation, and will provide for better study outcomes, leading to potentially more impactful conclusions and insight for ORPP and other RPPs. While

any individual results of this mixed methods study may not be generalizable to all RPPs, the resulting interpretations will be helpful to those who are considering starting comparable university-school partnerships, or to those who are already in the very early stages of exploration and implementation in them.

## **Conclusion**

### ***Implications for ORPP***

As detailed previously, the central purpose of this study was to determine the degree to which the ORPP model met proximal implementation outcome objectives through its process output efforts with partner schools. The proximal implementation outcomes of Proctor et al. (2011) of (a) appropriateness, (b) feasibility, (c) adoption, and (d) acceptability were used to help determine if the ORPP model was able to successfully integrate its process outputs (e.g. a. transferring knowledge from research to the field, b. identifying and addressing problems of practice, and c. increasing school improvement capacity building) into the schools it was working with. Numerous types of data were collected and analyzed to help make this determination. This data included ORPP-related emails and documents from September 1, 2017 to May 30, 2020, data from a survey completed in the fall of 2019 by teachers from ORPP partner high schools inquiring about their perceptions of ORPP-supported professional development, and semi-structured interviews with partner high school administration and lead teachers.

Through the DCA, it was shown that the majority of randomly selected emails and work documents analyzed for this project contained content unrelated to the ORPP model and its process outputs and that only a small portion (31.9%) contained content related to the proximal implementation outcomes of Proctor et al. (2011). The DCA results lead to the conclusion that

early goals and implementation strategies (i.e. process outputs) of ORPP were not incorporated into the routine on-going work efforts nearly as often as they should have been. Incorporating an implementation framework as an early guide, such as the Active Implementation Framework (AIF) could have facilitated a much-improved implementation trajectory for the ORPP model and the network as a whole.

A fit assessment at the start of the project's exploration stage would have helped to ensure all partner schools were an appropriate fit for the ORPP model's goals and objectives. As previously detailed, two schools in particular were not appropriate for the partnership simply because their most recent high school graduation rates were considerably higher than the Oregon state average. The primary goal of ORPP was to work with high schools to help improve their graduation rates.

Also, within the timeframe of the AIF exploration stage, early developers of the ORPP model would have improved its potential outlook by ensuring the innovation itself, the ORPP improvement model, was usable. Through this study, it is apparent that two large components were missing in the original model; (a) A viable mechanism to transfer knowledge (e.g. RBPs, and additional university faculty knowledge and expertise) to the field, and (b) school-based Lead Teacher and principal roles and responsibilities defined and documented prior to the start of the partnership.

The ORPP project, as a whole, tried to initiate work with partners too quickly. According to the AIF Implementation Stages, more time should have been taken during the exploration stage (as detailed previously) and the installation stage. Looking at the timeline of ORPP's implementation, the team likely could have taken the rest of the 2017-2018 school year to explore potential partners and completed work to ensure a usable, viable innovation.



Transitioning into its second year, it could have worked to examine the readiness of its own implementation drivers (e.g. the transfer of knowledge mechanism, practitioner readiness factors such as defined roles and duties for school partners, and defined details for dual credit courses such as cost to schools and students, etc.). Time should have also been taken to develop fidelity measures prior to official launch of the network to make sure they were in place right from the start. Because major components were missing from the exploration and installation stages, ORPP struggled in its attempts at initial implementation and made little to no progress.

Descriptive statistical analysis of school teacher data from completed surveys were helpful in showing the overall perceived value of ORPP-supported professional development, which at the time was one of the main drivers incorporated into ORPP efforts trying to achieve its process outputs of transferring knowledge from research to the field, identifying and addressing problems of practice and increasing school improvement capacity building. ORPP was attempting to ensure that teacher PD content had a basis in research-based practices (RBPs), that PD focused on established problems of practice, and that lead teachers (who had parts of their daily schedules carved out for ORPP-specific work) were being supported by ORPP staff and the network in general.

What analysis of the survey data showed was that, though it was only a one-time snapshot, there was a large amount of room for improvement. As previously mentioned major implementation drivers were missing to help ensure a usable innovation, including its efforts to create PD based in RBPs. A total of 120 teachers, across four schools, completed the surveys. This accounted for approximately 72.3% of the total teaching staff. Overall, 49.2% of respondents did not feel their time in the PD was well spent, and 39.2% did not believe it was useful. Out of all respondents, only 20% felt their teaching staff as a whole strongly supported

the PD, and only 21.7% felt that it very consistently aligned with their own PD goals. ORPP supported a process where Lead Teachers investigated potential areas of school improvement and attempted to coordinate efforts around those areas, which included PD topic areas, with their principals when possible. Ultimately, when PD was planned and implemented around these improvement areas (e.g. instructional engagement, student relationship building, etc.) they informed teaching staff about *why* PD topics were chosen, but they did not seek input on those topics from staff. Communicating with staff more, and then aligning that input with previously determined improvement focus areas, could have improved the perceived value of the PD by the teaching staff overall.

Thematic analysis of the interviews with former ORPP-partner school principals and lead teachers provided additional insight into the previously completed analyses. This insight came from the notes and transcripts generated from the semi-structured interviews, which fell into two general areas; information on how partnerships were established with ORPP early on (which this researcher had no real knowledge of previously) and how partnerships efforts were being coordinated and implemented on the ground between school and district staff at each partnership. As previously detailed in the case study synopses, CHS and RHS already had graduation rates well above the state average. They also both had existing, relatively robust dual credit course programs established with local community colleges. From interviews, it appears that these schools were chosen (along with SHS and JHS) more because of positive relationships with the Oregon university in question and ORPP leadership and desired geographic spread versus the schools needs and readiness for improvement work.

It also became clear through the interview process and thematic analysis that there was little to no input from actual building administration about the willingness and readiness of

school staff to take on this new endeavor. Additional interview input made it clear partnerships started with ambiguous goals and little description of roles and responsibilities early on. In the cases of SHS and JHS, this ambiguity was made more complex and convoluted by interference and goal switching that came from district level mandates to refocus school improvement efforts that included the implementation of grade level data teams at SHS and a refocus onto 9<sup>th</sup> grade on track efforts at JHS.

In summary, taking a slower more strategic and prepared approach would have greatly benefitted the ORPP project. Incorporating the AIF and steadfastly working through its stages and component pieces would have meant the avoidance of several missteps. The four multicase assertions detailed previously (e.g. poor recruitment practices, lack of defined roles and goals, lack of connection to district vision and goals, and lack of a mechanism to transfer knowledge into schools) would have almost certainly been addressed if the AIF would have been worked through and followed over time. ORPP was fashioned on the Ag Extension model as was described earlier. Figure 1 previously described this, particularly in how the Ag Extension model's three goals transferred into the three ORPP process outputs of (a) transfer of knowledge from research to the field, (b) working with practitioners to identify problems of practice and gaps in service and (c) to support school partners by increasing school improvement capacity building. Looking back over this study, it can be said that the ORPP model was not able to successfully mimic the Ag Extension model and its primary output goals, which have, by most accounts, been seen as very successful for farming over its lengthy history.

However, it is unfitting to compare the two as equivalents. There are clear differences in how farming and public education function, with different factors at play when determining successful yields. The “product differential” between a farmer's crop output with and without

extension is usually categorized into two areas, a technology gap and a management gap. As Anderson and Feder (2007) put it, “Extension helps to reduce the differential between potential and actual yields in farmers’ fields by accelerating technology transfer (i.e., to reduce the technology gap) and helping farmers become better farm managers (i.e., to reduce the management gap)” (p. 2346). Anderson and Feder (2007) go on to explain that in addressing both of these gaps, extension services are able to directly apply new scientific and technological solutions into their work with farmers. Those solutions often involve both economic and risk management-based decisions that determine “efficient use of resources” (Anderson & Feder, 2007, p. 2347). Schools cannot function the same way. Students are not crops to be experimented with. There is no option where a lab can test with students to the point of failure. Schools cannot just shift resources away from one classification of student population to another because of a perceived outcome reduction (i.e. low yield) or a determination that one group of students will not produce the results the educators want. While farming and the work Ag Extension endeavors in are incredibly complex, they are simply not dealing with the countless intricacies of cultivating an amazingly diverse array of individuals, within a societal system that is relentlessly evolving and changing. And while the results of this study mostly indicate that the ORPP model failed to be implemented successfully throughout its school network, its process outputs of growing improvement capacity, identifying problems of practice and transferring knowledge in an effort to address them seem to still have potential. While the first two and a half years of implementation may have been lacking in a number of areas, there are lessons learned here and aspects of the work and the relationship building that took place helped to create a foundation that more improvement efforts can be built from.

Another aspect of future implications for ORPP, and other similarly shaped RPPs, is the need to look into additional scholarship around implementation “champions.” As with early implementation science in general, much of the early research around the potential benefits of implementation champions comes from the health care field (Miech et al., 2018). There is, however, an ostensibly growing body of work examining the importance of champions that help lead on-the-ground school improvement implementation efforts (Adelman & Taylor, 2007; Beaver & Weinbaum, 2012; Wiggins et al., 2019). Adelman and Taylor (2007) identify champions as school staff who agree to help steer improvement processes, who they themselves become, “potent mechanisms for guiding change” (p. 65). Based on results of this study, it can be argued that CHS and RHS had school improvement champions in their Lead Teachers. In numerous ways, they took the ORPP model and made it their own, strengthening it in specific ways (i.e. separate PD focus area PLCs at CHS) where other lead teachers did not. Additionally, it can also be argued that no single administrator became a champion, or strong driver, for the ORPP model. These champions, unlike in the ORPP model under study here, should also have clear vertical alignment and regular communication with their school district leadership to ensure initial and ongoing alignment with their overall vision and goals. This is an area that should be investigated more in future RPP endeavors for both ORPP and beyond, recognizing that potential success of any specific improvement efforts are just as much about the people implementing the system as it is the system itself.

### ***Future Directions***

As of this writing, the ORPP as an organization is still functioning. Individual school partnerships have ceased altogether. Lessons have been learned from this early experience, and adjustments and adaptations have been made to its model. As such, partnerships have shifted to

those with school districts or larger umbrella Educational Service Districts (ESDs), where work focuses around needs determined by ESDs and their numerous component school districts. Work is much more vertically aligned. Future directions for ORPP will include the incorporation of the AIF as a guide to help evaluate and improve the implementation of ORPP as an organization, and its outcomes with school partners. Efforts are currently under way to incorporate a continuous improvement cycle to help regularly evaluate the processes of the ORPP model itself, not just the separate improvement efforts taking place in partner schools. Those

More specifically, ORPP hopes to incorporate the following recommendations, which it also advises other similar networks to embrace.

- As a very first step, integrate an appropriate implementation guide or framework such as the Active Implementation Framework (AIF) from Blanchard et al. (2017) into early planning and development of a similar network innovation. This will help ensure that time is taken to think about and develop required stages, components and drivers for the network.
- Have an assessment process in place at the start to determine school fit and readiness prior to adding them into any school improvement network. If partners do not need to improve in the area(s) the improvement innovation is aimed at, or if they are not ready to implement the model in those areas, then the model is likely not an appropriate fit for them and chances of success will be poor.
- As part of defining the innovation early on, determine and develop appropriate implementation drivers (organizational support at both the university and school levels, support for practitioners on the ground and whole network leadership capacity) to ensure the work can be adopted to a high degree across the network. Transferring knowledge in

the form of RBPs is challenging work, and so this mechanism should be clearly defined and supported prior to the network beginning in earnest.

- Take the time to ensure all practitioners, in the case of ORPP the Lead Teachers, on the ground are ready to implement the innovation. This means taking the time to properly train them prior to implementing the innovation on the ground, and have the proper support in place to assist them along the way.
- Have fidelity measures in place prior to implementation of the innovation. Have clear ideas of what the goals of the innovation are and measures in place to determine if and how those goals were reached.

Finally, this researcher acknowledges that much of the results discussed here can be considered part of an overall implementation failure. As Fixsen et al. (2005) allude to, much can be learned from implementation failure. I believe many others would agree with this mindset, myself included. Fixsen et al. also discuss the notion that implementation success can also include iterative learning opportunities from early missteps. The ORPP has learned numerous lessons from initial mistakes and has incorporated a number of them in its recent pivot in a way that is now indicating more success with current partners and its new model. While much more work and evaluation still need to be done, the project team feels we are heading in the right direction. My hope is that others find value in these lessons learned as well.

## APPENDIX A

### FINAL CODING SCHEME FROM QCAMAP.ORG

**Research Question #1** How *appropriate* was the fit of the original ORPP model (based on tenets of the Agricultural Extension service standard) for each school *prior to the start* of the partnership in the fall of 2017?

<p><b>Content analytical units</b></p> <p><b>Coding unit</b> Single word</p> <p><b>Context unit</b> Looking for examples of appropriateness (e.g. perceived fit) being addressed in email communication and general work documents of the [redacted] partnership, and specifically its three process outputs / goals (knowledge transfer, identification of problems of practice, improvement capacity) from prior to initial implementation of the partnership in January 2018. Key word examples: Appropriate, compatible, perceived fit, relevant / relevance, related, suitable, useful, valuable, beneficial, helpful, practical, fitting / fit(s) / good fit, appreciated, proper, right / correct, applicable, match / matched / well-matched, connected / interconnected, support / supporting / supported. Antonyms: Inappropriate, improper, incorrect, irrelevant, unfitting, unsuitable, unfit.</p> <p><b>Recording unit</b> 1 Document Count multiple codings per document</p>	<p>This central space is where the actual email text or work document would be embedded where coders simply highlight text with their mouse cursor and mark it as one of the corresponding color codes on the right, the ORPP process outputs.</p>	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <p><b>RQ5-1: Transferring knowledge to [redacted] partner schools</b></p> <p>Evidence-based practices (EBPs) can include research (peer-reviewed articles), evidence-based curriculum, or [redacted] COE faculty and researchers with specific areas of expertise that they have published and researched in. So, any evidence of [redacted] staff working with schools using evidence or research based practices.</p> <p><b>Anchor examples</b> Evidence-based practice, research evidence, research, researcher, faculty, usable innovation, innovation, evidence-based curriculum, evidential basis</p> </div> <hr/> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <p><b>RQ5-2: Identifying and Addressing Problems of Practice</b></p> <p>Problems of Practice can include gaps in service to students (including underserved subgroups), specifically identified problems that are impacting students academic and behavioral growth. They can involve aspects of school culture, school systems and school structures, or any combination of them. IT CAN ALSO INCLUDE DISCUSSION OF GOALS for schools (which is a discussion of PROBLEMS and HOW TO APPROACH SOLVING THEM).</p> <p><b>Anchor examples</b> Problem of practice, problem, POP, gap, gap in service, service gap, challenge, issue, difficulty, setback, dispute, concern, failure, not meeting needs, lack of improvement, lack of, not enough of, keep trying to. ALSO: Goals, solutions, addressing the issue, looking for solutions, etc.</p> </div> <hr/> <div style="border: 1px solid #ccc; padding: 5px;"> <p><b>RQ5-3: Building School Improvement Capacity</b></p> <p>Building school improvement capacity can include the increase of any personnel, time, resources, or abilities of those responsible for the improvement efforts of the school in question, particularly as its relates to the direct efforts of the [redacted] partnership. This can also look like discussions of TEAMS, working together, collaborating, joining meetings, connecting with staff, helping problem solve or work on specific tasks in collaboration between [redacted] staff and school staff.</p> <p><b>Anchor examples</b> Improvement, improvement efforts, capacity, time, increased time, bandwidth, team, delegate, delegation, partnership, work with, collaborate, working together, helping out with, meeting with, etc.</p> </div>
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Above is what coders saw, with the research question being posted above it. If coders saw an example of appropriateness within the central text, they would then code for signs of process outputs (right) they saw.



**Research Question #2** How *feasible* was the fit of the original ORPP model (based on tenets of the Agricultural Extension service standard) for each school during early ORPP implementation from fall 2017 through to May 2020?

<p><b>Content analytical units</b></p> <p><b>Coding unit</b> Single word</p> <p><b>Context unit</b> Looking for examples of feasibility (e.g. suitability or intention to adopt) being addressed in email communication and general work documents of the [REDACTED] partnership, and specifically its three process outputs / goals after initiation (post January 11, 2018). Key word examples: Feasible, possible, viable, carried out, suitable / suited, practical / practicability, ready / readiness, to use, incorporate, include, integrate, intend, intention to try, to try / going to try / trying. Antonyms: Inappropriate, improper, incorrect, irrelevant, unfitting, unsuitable, unfit.</p> <p><b>Recording unit</b> 1 Document Count multiple codings per document</p>	<p>This central space is where the actual email text or work document would be embedded where coders simply highlight text with their mouse cursor and mark it as one of the corresponding color codes on the right, the ORPP process outputs.</p>	<p><b>RQ5-1: Transferring knowledge to ORSN partner schools</b></p> <p>Evidence-based practices (EBPs) can include research (peer-reviewed articles), evidence-based curriculum, or [REDACTED] COE faculty and researchers with specific areas of expertise that they have published and researched in. So, any evidence of [REDACTED] staff working with schools using evidence or research based practices.</p> <p><b>Anchor examples</b> Evidence-based practice, research evidence, research, researcher, faculty, usable innovation, innovation, evidence-based curriculum, evidential basis</p> <hr/> <p><b>RQ5-2: Identifying and Addressing Problems of Practice</b></p> <p>Problems of Practice can include gaps in service to students (including underserved subgroups), specifically identified problems that are impacting students academic and behavioral growth. They can involve aspects of school culture, school systems and school structures, or any combination of them. IT CAN ALSO INCLUDE DISCUSSION OF GOALS for schools (which is a discussion of PROBLEMS and HOW TO APPROACH SOLVING THEM).</p> <p><b>Anchor examples</b> Problem of practice, problem, POP, gap, gap in service, service gap, challenge, issue, difficulty, setback, dispute, concern, failure, not meeting needs, lack of improvement, lack of, not enough of, keep trying to. ALSO: Goals, solutions, addressing the issue, looking for solutions, etc.</p> <hr/> <p><b>RQ5-3: Building School Improvement Capacity</b></p> <p>Building school improvement capacity can include the increase of any personnel, time, resources, or abilities of those responsible for the improvement efforts of the school in question, particularly as its relates to the direct efforts of the [REDACTED] partnership. This can also look like discussions of TEAMS, working together, collaborating, joining meetings, connecting with staff, helping problem solve or work on specific tasks in collaboration between [REDACTED] staff and school staff.</p> <p><b>Anchor examples</b> Improvement, improvement efforts, capacity, time, increased time, bandwidth, team, delegate, delegation, partnership, work with, collaborate, working together, helping out with, meeting with, etc.</p>
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Above is what coders saw, with the research question being posted above it. If coders saw an example of appropriateness within the central text, they would then code for signs of process outputs (right) they saw.

**Research Question #3** How has each ORPP partner school differed in their overall *adoption* (including their original intent and eventual uptake) of the ORPP output goals from inception through to May, 2020?

<p><b>Content analytical units</b></p> <p><b>Coding unit</b> Single word</p> <p><b>Context unit</b> Looking for examples of adoption (e.g. uptake or utilization) being addressed in email communication and general work documents of the [REDACTED] partnership, and specifically its three process outputs / goals with the schools existing values, individual setting, and particular needs after initiation (post January 11, 2018). Key word examples: Uptake, apply, accept, select, embrace, select, utilization, use of / use of innovation / use of research, employ / deploy, employed, engaged, knowledge transfer / to transfer knowledge, to use / to incorporate / to include / to integrate, enact, implement / to implement / implementation / implemented. Antonyms: Deny, disagree, disapprove, discard, ignore, oppose, refuse, reject.</p> <p><b>Recording unit</b> 1 Document Count multiple codings per document</p>	<p>This central space is where the actual email text or work document would be embedded where coders simply highlight text with their mouse cursor and mark it as one of the corresponding color codes on the right, the ORPP process outputs.</p>	<p><b>RQ5-1: Transferring knowledge to ORSN partner schools</b></p> <p>Evidence-based practices (EBPs) can include research (peer-reviewed articles), evidence-based curriculum, or [REDACTED] COE faculty and researchers with specific areas of expertise that they have published and researched in. So, any evidence of [REDACTED] staff working with schools using evidence or research based practices.</p> <p><b>Anchor examples</b> Evidence-based practice, research evidence, research, researcher, faculty, usable innovation, innovation, evidence-based curriculum, evidential basis</p>
<p>Above is what coders saw, with the research question being posted above it. If coders saw an example of appropriateness within the central text, they would then code for signs of process outputs (right) they saw.</p>		<p><b>RQ5-2: Identifying and Addressing Problems of Practice</b></p> <p>Problems of Practice can include gaps in service to students (including underserved subgroups), specifically identified problems that are impacting students academic and behavioral growth. They can involve aspects of school culture, school systems and school structures, or any combination of them. IT CAN ALSO INCLUDE DISCUSSION OF GOALS for schools (which is a discussion of PROBLEMS and HOW TO APPROACH SOLVING THEM).</p> <p><b>Anchor examples</b> Problem of practice, problem, POP, gap, gap in service, service gap, challenge, issue, difficulty, setback, dispute, concern, failure, not meeting needs, lack of improvement, lack of, not enough of, keep trying to. ALSO: Goals, solutions, addressing the issue, looking for solutions, etc.</p>
		<p><b>RQ5-3: Building School Improvement Capacity</b></p> <p>Building school improvement capacity can include the increase of any personnel, time, resources, or abilities of those responsible for the improvement efforts of the school in question, particularly as its relates to the direct efforts of the [REDACTED] partnership. This can also look like discussions of TEAMS, working together, collaborating, joining meetings, connecting with staff, helping problem solve or work on specific tasks in collaboration between [REDACTED] staff and school staff.</p> <p><b>Anchor examples</b> Improvement, improvement efforts, capacity, time, increased time, bandwidth, team, delegate, delegation, partnership, work with, collaborate, working together, helping out with, meeting with, etc.</p>

**Research Question #4** How has each ORPP partner school differed in their perception of overall *acceptability* of the ORPP from inception through to May, 2020?

<p><b>Content analytical units</b></p> <p><b>Coding unit</b> Single word</p> <p><b>Context unit</b> Looking for examples of acceptability (e.g. satisfaction or appreciation) being addressed in email communication and general work documents of the [REDACTED] partnership, and specifically its three process outputs / goals with the schools existing values, individual setting, and particular needs after initiation (post January 11, 2018). Key word examples: Acceptable, satisfactory, adequate, useful, practical, reasonable, suitable, ample, value / valued / valuable, beneficial, appreciate, positive, favorable, enthusiastic / unenthusiastic, excited, constructive, negative. Antonyms: Reject, decline, disagree, deny, discard, dispute, refuse, ignore, let go, stop.</p> <p><b>Recording unit</b> 1 Document Count multiple codings per document</p>	<p>This central space is where the actual email text or work document would be embedded where coders simply highlight text with their mouse cursor and mark it as one of the corresponding color codes on the right, the ORPP process outputs.</p>	<p><b>RQ5-1: Transferring knowledge to ORSN partner schools</b></p> <p>Evidence-based practices (EBPs) can include research (peer-reviewed articles), evidence-based curriculum, or [REDACTED] COE faculty and researchers with specific areas of expertise that they have published and researched in. So, any evidence of [REDACTED] staff working with schools using evidence or research based practices.</p> <p><b>Anchor examples</b> Evidence-based practice, research evidence, research, researcher, faculty, usable innovation, innovation, evidence-based curriculum, evidential basis</p> <hr/> <p><b>RQ5-2: Identifying and Addressing Problems of Practice</b></p> <p>Problems of Practice can include gaps in service to students (including underserved subgroups), specifically identified problems that are impacting students academic and behavioral growth. They can involve aspects of school culture, school systems and school structures, or any combination of them. IT CAN ALSO INCLUDE DISCUSSION OF GOALS for schools (which is a discussion of PROBLEMS and HOW TO APPROACH SOLVING THEM).</p> <p><b>Anchor examples</b> Problem of practice, problem, POP, gap, gap in service, service gap, challenge, issue, difficulty, setback, dispute, concern, failure, not meeting needs, lack of improvement, lack of, not enough of, keep trying to. ALSO: Goals, solutions, addressing the issue, looking for solutions, etc.</p>
<p>Above is what coders saw, with the research question being posted above it. If coders saw an example of appropriateness within the central text, they would then code for signs of process outputs (right) they saw.</p>		

## APPENDIX B

### ORPP-SUPPORTED TEACHER PROFESSIONAL DEVELOPMENT SURVEY

#### Default Question Block

As a teacher in one of the participating high schools with the [REDACTED] [REDACTED] we are requesting that you participate in this voluntary survey for the [REDACTED] [REDACTED] College of Education. Signing your name below signifies your consent to participate.

Part of the efforts of [REDACTED] are to study ongoing professional development efforts in your school. We are requesting your participation, which will involve the completion of this survey. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty or consequences whatsoever. If at any time you discontinue the survey, your results will be discarded. All survey submissions from classroom educators will be completely anonymous, other than the collection of the school you currently teach at. No other personally identifying information will be used. There are no personal risks of the survey or study. Potential benefits of the study include:

- Increased participation and effectiveness of professional development in your school
- Increased development of instructional & pedagogical strategies for your classroom
- Potential long term increases in student achievement and overall graduation rates

If you have any questions concerning this survey or the larger aspects of the research study, please contact your school's [REDACTED] Clinical Professor, school administrator or email [REDACTED]. This research has been approved by the [REDACTED] [REDACTED]'s Institutional Review Board. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact [REDACTED] Research Compliance Services at [REDACTED] or contact them through their website at [REDACTED]

## SIGN HERE

×

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[clear](#)

Please select your school district.

Coquille School District

Eugene School District

Pendleton School District

Portland Public Schools

What is your role at your school?

Teacher

Counselor

Instructional Assistant

Administration

Other

How many years have you been teaching?

1-2

3-5

6-10

11+

How many years have you been teaching at your current school?

1-2

3-5

6-10

11+

#### PD Structural Features

**The following questions will give you an opportunity to provide feedback on the professional development provided to you this year by your school/district.**

*Please answer truthfully and thoughtfully.*

This school year, how many topics did your professional development focus on?

1                      2                      3                      4                      5                      6+

This school year, what was the primary professional development theme or topic?

**What were the forms of these professional development activities?**

*Check all that apply.*

Peer observation

Analyzing student work

Analyzing student data

Professional learning community (PLC)

Teacher-led instructional coaching

Mentor relationship

Seminar

Conference

Guest speaker

Program implementation

Curriculum adoption training

Other (please specify)

**Block 2**

**Regarding the professional development this year, please mark your most accurate feelings regarding the following statements.**

	Strongly Disagree	Somewhat Disagree	Agree	Strongly Agree
I liked the professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My time was well spent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The material made sense	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It was useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leader was knowledgeable and helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Block 3**

So far this school year, how many professional development sessions were conducted for teachers at your school (i.e., school-related professional development activities)?

*Note that a two-day training would count as two sessions.*

1      2      3      4      5      6      7      8      9      10+

How many of those opportunities did you attend?

None                  Few                  Half                  Most                  All

What is the total number of **hours** you spent in professional development activities so far this school year?

Which months this school year did you have professional development activities?

*Check all that apply*

Aug      Sep      Oct      Nov      Dec      Jan      Feb      Mar      Apr      May

**Block 4**

For whom was the professional development designed?

any teacher, in any school

specifically teachers in my school

specifically teachers in my district

teachers as representatives of their department

teachers in a specific grade level

other (please specify)

**Rate how well the school staff supported professional development in your building during the past school year.**

	Not at all supportive	Weakly supported	Moderately supported	Strongly supported
To what extent did the school administrator(s) support this professional development?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To what extent did the teachers in your school support this professional development?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Block 5**

**Personal impact of the professional development on your teaching.**

	Yes	No	N/A
Did you receive coaching or mentoring as part of the professional development?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was your teaching observed as part of the professional development? The observation could have been done by the PD leader(s), and administrator, teacher, or other PD participant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If your teaching was observed as part of the professional development activity, was feedback was provided?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**As part of the professional development, did you:**

*Please check all that apply*

- practice under simulated conditions, with feedback
- meet formally with other teachers to discuss classroom implementation
- communicate with the leader(s) of the PD about classroom implementation
- meet informally with other teachers to discuss classroom implementation
- develop curricula or lesson plans that other teachers or the activity leader reviewed
- give a lecture or presentation



- conduct a demonstration of a lesson, unit, or skill
- lead a group discussion
- write a paper, report, or plan
- review student work or score assessments
- have other teachers or the PD leader review work completed by your students
- Other (Please specify)

**Block 7**

**The professional development was:**

	Not at all	Weakly	Moderately	Very Much
consistent with your goals for professional development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
followed with activities that built upon what was learned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
aligned with state or district standards and curriculum frameworks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
aligned with state and district assessments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Related to the professional development, did you discuss what you learned with:**

*Please check all that apply*

- other teachers in your school who attended
- other teachers in your school who did NOT attend
- administrators (e.g., principal or department head)
- other teachers not in your school
- None of these

**Block 6**

Indicate the degree to which your **knowledge and skills** were enhanced as a result of the professional development.

Not at all enhanced      Weakly enhanced      Moderately enhanced      Strongly enhanced

How often did you apply the **knowledge and skills** learned in professional development in your work with students?

Not at all                      Some                      Frequently                      Very frequently

Indicate the areas in which your **knowledge and skills** have been enhanced as a result of the professional development

*Check all that apply*

curriculum (e.g., units, texts, standards)

content knowledge

instructional methods

approaches to assessment

use of technology in assessment

strategies for teaching diverse student populations; e.g., students with disabilities, from underrepresented populations, economically disadvantaged, English learners (please specify)

None

Other (please specify)

Please elaborate on how your **knowledge and skills** have been affected by professional development during this school year.

## Block 7

Indicate the degree to which your **teaching practices** were enhanced as a result of the professional development

Not at all enhanced      Weakly enhanced      Moderately enhanced      Strongly enhanced

How much did this year's professional development affect your **teaching practices** or your work with students?

Not at all                      A little                      Some                      A lot

Indicate the areas in which your **teaching practices** have been enhanced as a result of the professional development.

*Check all that apply*

curriculum coverage

content standards

instructional methods employed

types or mix of assessments used to evaluate students

ways technology is used in instruction

approaches taken to student diversity

cognitive challenge of classroom activities

None

Other (please specify)

Please elaborate on how your **teaching practices** have been affected by professional development during this school year.

### **Student Learning Outcomes**

What was the impact of the professional development on the students in your school?

## APPENDIX C.1

### DR. KAMPHAUS SEMI-STRUCTURED INTERVIEW QUESTIONS

#### Interview Questions for The College of Education Dean on the founding of ORPP

1. What Oregon-specific factors were you aware of that made you think of the initial need of a partnership effort like ORPP?
2. What was your original connection to, and knowledge of, the idea of using the Agricultural Extension service as a model for ORPP?
3. What did the process look like when originally going to the [the university] President's office to apply for the initial funding? Were there others involved in laying out the early design of how ORPP would function?
4. How were the four original schools (SHS, RHS, CHS and JHS) originally selected? Who was a part of that selection process? What steps were taken to initially identify them and bring them on board?
5. How was [ORPP Director] initially brought in to work with ORPP?
6. How was Sol Joye initially brought in to work with ORPP?
7. From an organizational perspective, where do you want to see ORPP fit in among the other research and outreach units within the College of Education?
8. How has your short-term and long-term vision of ORPP changed since its inception?

## APPENDIX C.2

### ORPP EDUCATOR AND EDUCATIONAL LEADER INTERVIEW QUESTIONS

<b>Date:</b>	<b>Time:</b>	<b>Platform:</b>
<b>Interviewee:</b>		
<b>Saved Recording File Name:</b>		
<b>Additional notes:</b>		

1. What is your professional background in education?
2. How were you initially involved in the ORPP?
  - a. How were you first informed about your high schools' potential inclusion in the new ORPP?
  - b. What was your initial response?
  - c.
3. What was your initial understanding of the goal of the ORPP project?
4. How did you foresee the initial ORPP project implementation in your school taking place?
  - a. What did you hope you and your school would get out of the partnership?
5. How did you first see the ORPP improvement work aligning with your existing school improvement efforts?
  - a. Did that first impression change over time? How?

6. What did you originally see as your role, and your administrative team's role, in the ORPP?
  - a. Did that first impression change over time? How?
  
7. Once the ORPP began in earnest, what did you see was working well? What was not working well?
  
8. What was your impression of the communication like within the ORPP?
  - a. How were you directly involved in that communication?
  
9. How did you see the ORPP impacting your school's improvement efforts?
  
10. How could the ORPP been changed or improved to better serve your schools needs and improvement goals?

Is there anything else you can think of that you would like to add to this discussion?

## APPENDIX D

### DCA EMAIL COLLECTION AND FILTERING PROCESS

- I. Collect ALL emails (from myself and ORPP Director) from Sept 1 2017 to May 31 2020
- II. Export ALL of those emails into EXCEL from Outlook (using Outlook export .OLM archive file) using the following process
  - a. Mark ALL emails from that time frame with a “DCA DISS ORPP” Category (GREEN) within Outlook itself (select range – categorize)
  - b. Export ALL Outlook emails from that **category** Outlook into .OLM file
    - i. Including INBOX, OUTBOX, Trash, and any subfolders w those dates.
    - ii. Raw emails (no search terms to remove unrelated emails) = 20,892
  - c. Transfer emails from .OLM to .CSV spreadsheet file using MacUncle OLM Converter App

- III. Using a purchased add-on set of tools for Excel called Kutools for Excel which added some additional filtering and cleaning processes in GUI form and then used the following to search ALL emails for specific keywords:

Create ‘Result’ category to be marked ‘TRUE’ or ‘FALSE’ based on following formula:

=SUMPRODUCT(--ISNUMBER(SEARCH(keywords,C23:G23)))>0

‘keywords’ above uses the ‘named ranges’ capability in Excel (<https://exceljet.net/named-ranges>)

- IV. Applying to ALL of the A column for all the thousands of emails included then using Filter command – Removing ALL emails that have a FALSE statement in A column (those that did not have at least one of the keywords in the names-ranges list example below):

Keywords of emails to keep included:

ORPP	Lead Teacher All partner web
Oregon Research Practice	domains (removed)
Partnership	All partner last names (removed)
CACP	All partner school names (removed)
Courtesy Appointment	All partner school acronyms
Courtesy Appointment	(removed)
Clinical Professor	

- V. Generally, this process was then reversed and repeated with new / additional keywords that were to be removed until it was cleaned of any emails not directly

related to ORPP work with school partners. Though not an exhaustive list, keywords for emails to be removed from remaining list included:

Fifty-six email addresses that had nothing to do with ORPP work were all removed, some examples include:

info@eval.org  
info@signupgenius.com  
mailer@doodle.com  
coe-staff emails

Additional keywords removed:

makerspace  
maker space  
Undeliverable  
Yearbook  
PRIDE  
TechSmith  
Tech smith  
Camtasia

itunes.com  
@google.com  
Accepted:  
Alert  
Automatic reply  
Cancelled:  
Declined:  
maker  
makermedia  
Practicum  
Preservice  
PGA Dates



# APPENDIX E

## QCAMAP TOOL CODING INTERFACE

<p><b>QCAMap</b> <span style="float: right;"><a href="#">Back</a></span></p> <p>You are in coding mode.</p>	<p><b>Question for analysis</b></p> <p>RQ1: How appropriate was the fit of the ...</p> <p><b>Content analytical technique</b> Deductive Category Assignment</p> <p><b>Content analytical units</b> Coding unit Single word</p> <p><b>Context unit</b> Looking for the appropriateness (e.g. perceived fit) of [redacted] partnership and its three process outputs / goals in documents from prior to initial implementation of the partnership in January 2018.</p> <p><b>Recording unit</b> 1 Document Count multiple codings per document</p> <p>Search <span style="float: right;">≡ Hide coding guideline</span></p> <p>Finish coding ▶</p>	<p><b>Coding guideline</b> <span style="float: right;">✕</span></p> <p><span>⊕</span> Add new category</p>
<p><b>Sample email.docx</b></p> <p>Sample email Dated January 29th, 2019 To: Anonymized From: Anonymized Subject: Roles for lead teacher for school X</p> <p>Hello X, I met with my principal yesterday to discuss my new role. We went over the MOU and talked about my duties and responsibilities for our upcoming improvement efforts. I am really excited to start working with the administrative team on upcoming professional development calendar. I wanted to check in with you after chatting with X. In the current job description, it mentions working with leadership teams, but we have an Instructional Development Team (IDT) that is responsible for much of the professional development delivery. I have been asked to step in and support this team, trying to work with you to find evidence-based resources, etc. that the IDT could use in creating PD for the upcoming spring term. Does that sound like I am on the right track? Is there a place I can try to locate those resources? Thanks! X</p>	<p><b>RQ1-1</b> <span style="color: red;">■</span> <span style="border: 1px solid red; padding: 2px;">RQ1-1</span></p> <p><b>RQ1-2</b> <span style="color: orange;">■</span> <span style="border: 1px solid orange; padding: 2px;">RQ1-2</span></p> <p><b>RQ1-3</b> <span style="color: orange;">■</span> <span style="border: 1px solid orange; padding: 2px;">RQ1-3</span></p> <p style="font-size: small; text-align: center;">Building School Improvement Capacity</p>	<p><span style="color: red;">●</span> <b>RQ1-1: Transferring knowledge to ORSN partner schools</b></p> <p>Evidence-based practices (EBPs) can include research (peer-reviewed articles), evidence-based curriculum, or COE faculty and researchers with specific areas of expertise that they have published and researched in.</p> <p>Anchor examples evidence-based practice, research evidence, research, researcher, faculty, usable innovation, innovation, evidence-based curriculum, evidential basis</p> <p>Coding rules Document must be dated prior to January 11, 2018 (first CACP meetings start)</p> <p><span style="color: blue;">●</span> <b>RQ1-2: Identifying and Addressing Problems of Practice</b></p> <p>Problems of Practice can include gaps in service to students (including underserved subgroups), specifically identified problems that are impacting students' academic or behavioral growth. They can involve aspects of individual students, teams and school structures, or any combination of them.</p> <p>Anchor examples Problem of practice, problem, PDP, gap, gap in service, service gap, challenge, issue, difficulty, setback, dispute, evidence of need, need, lack of improvement, lack of, not enough of, keep trying to.</p> <p>Coding rules Document should be dated after January 11, 2018.</p>
		<p><span style="color: orange;">●</span> <b>RQ1-3: Building School Improvement Capacity</b></p> <p>Building school improvement capacity can include the increased time, bandwidth, team, delegate, delegation, partnership, work with, collaborate.</p> <p>Anchor examples improvement efforts, capacity, time, increased time, bandwidth, team, delegate, delegation, partnership, work with, collaborate.</p> <p>Coding rules Document should be dated after January 11, 2018.</p>

## APPENDIX F

### INTER CODER TIMELINE

- Starting in March 2021, recruitment for undergraduate students was started to help with coding for the intercoder reliability part of the DCA work. Because of COVID it was a challenge getting two coders to help. Eventually through reaching out to Dr. Krista Chronister and Dr. Jeff Todahl, I was able to recruit two students.
- By May, 2021 I had two students recruited. One was paid out of pocket per hour, and the other received research work credit through Dr. Chronister. Training sessions with the three of us as coders took place on:
  - May 14<sup>th</sup>, 2021
  - May 26<sup>th</sup>, 2021
- Then we completed an initial practice round to test the QCAMAP tool to make sure it was setup correctly and to compare initial coding on some made up email and work documents. This was completed independently between June 2<sup>nd</sup> and June 14<sup>th</sup> 2021.
- We met one more time as a team on June 18<sup>th</sup> 2021 to discuss results from the initial practice round to examine results and to work on aligning our understanding of the coding scheme etc.
- We then set a date to complete the actual coding for the intercoder agreement process. We were initially set to independently code all documents by July 9<sup>th</sup>. The third coder, an international student, went back to their home country and was not able to complete this coding unfortunately.
- It was determined, with approval of Dr. Biancarosa, that we could continue with two coders. This caused some delay in the completion of the final coding. This work was completed by both coders by August 10<sup>th</sup>, 2021.

# APPENDIX G

## ORPP IMPROVEMENT MODEL V3.8 FROM JAN 10, 2019

### The ORSN Improvement Model

What is ORSN? ORSN is an effort to improve the academic outcomes for Oregon's high school students through collaborative partnerships between Oregon faculty members and on-site expert teachers, in high schools across the state. Stakeholder input and collaboration from teachers, educational leaders, students, families and the community are critical to the success of the network. Based on the Agricultural Extension service model of having university faculty in the field, the ORSN collaborates on the facilitation of instructional improvement through professional development, cooperative field-initiated research, and the assistance of dual-credit options. The ultimate outcome is to increase the graduation rate for Oregon's students.

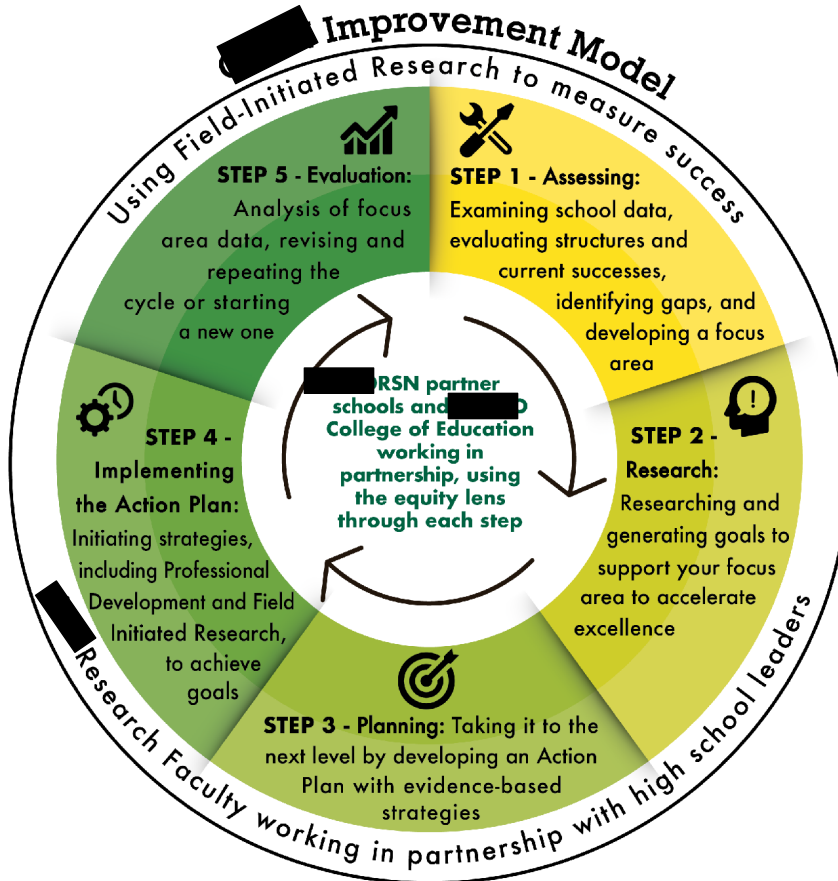
#### Key ORSN Goals

1. Effective Professional Development
2. Valued Field-Initiated Research
3. Facilitate UO Dual-Credit Options



#### Key ORSN Outcomes

1. Increased Student Achievement
2. Improved Behavioral Outcomes
3. Increased Graduation Rates



## Establishing University of Oregon's Commitment

The [redacted] was created to help all Oregon students increase academic and behavioral outcomes to ensure they graduate from high school. The [redacted] Improvement Model is the foundational framework that helps our research practice partnership in making this happen. Critical to this partnership is the utilization of the [Oregon Education Investment Board \(OEIB\) Equity Lens](#) throughout each and every step of the Improvement Model process. All [redacted] work needs to utilize the Equity Lens to ensure that changes and improvements to school practices are equitable and incorporate *all students* and helps them *achieve excellence*.

### STEP ONE



**Assessing:** Examining school data, evaluating structures and current successes, identifying gaps and developing a *Focus Area*.

**Using the Equity Lens:** Start the entire process by familiarizing yourself with the [OEIB Equity Lens](#) and apply the included questions when determining what and how to collect data. Be sure to collect data on what is WORKING and what is NOT WORKING. Both are equally important! A few examples of the Equity Lens questions are listed below.

#### Equity Lens questions to help evaluate existing school structures:

1. Who are the racial/ethnic and underserved groups affected? What is the potential impact of the resource allocation and strategic investment to these groups.
2. Does the decision being made ignore or worsen existing disparities or produce other unintended consequences? What is the impact on eliminating the opportunity gap?
3. How will you modify or enhance your strategies to ensure each learner and communities' individual and cultural needs are met?
4. How are you collecting data on race, ethnicity, and native language?

**IMPORTANT:** It is critical that the Equity Lens and its questions be utilized at each and every step of the entire [redacted] Improvement Model.

**1A. Examining School-Wide Data:** What is working well in your school? What is happening to increase student achievement and graduation rates? Data is a critical component in assessing current school successes. You will need to collect school-wide data, state report card data, internal survey data and any other data you have access to that may help determine what is proactively working in your school to increase student achievement and graduation rates. *It is important that you work with school administration and the leadership team to help collaboratively examine the data. Summarize the most important findings, reference the Equity Lens and be sure to include specific data for your school.*

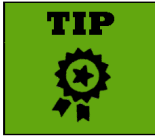
**IMPORTANT:** Do not get bogged down in endless data, find what is important and move on.

**STEP 1A: Continued**

**What is Working and What is not Working Chart:** Once the data has been collected and examined, fill out the chart below so you can tell, based on the data, what is working and what is not working towards helping students graduate. First fill in the 'Data on what IS working' column and then the Data on what is NOT working' column. Completing this form will help you determine if you need to create a new *Focus Area*, modify an existing *Focus Area* or stay with the current *Focus Area*.

<b>Data on what IS working:</b>	<b>Data on what is NOT working:</b>
<p>Ex. (delete): Our current school-wide discipline system is not working for all students. In the 17-18 school year 19% of our students were classified as non-white, yet 56% of our school suspensions and expulsions were for non-white students. We need to examine the system to see how it may be disproportionately targeting our diverse non-white student population.</p>	<p>Ex. (delete): Our current school-wide discipline system is not working for all students. In the 17-18 school year 19% of our students were classified as non-white, yet 56% of our school suspensions and expulsions were for non-white students. We need to examine the system to see how it may be disproportionately targeting our diverse non-white student population.</p>
<p><b>Celebrate your schools' successes!</b> Take a moment to celebrate your schools' successful structures. There is rarely time to celebrate the successes in our schools. Take the time to acknowledge what is working to help increase student outcomes, celebrate those efforts and think about how these successful structures can be potentially leveraged in later steps of the Improvement Cycle.</p>	

**1B. Evaluating Structures:** Structures of all sorts are put in place to support student achievement within schools. The school-wide data you have collected in STEP 1A will help you identify structures that need further evaluation. This evaluation is critical in examining the structures in your school to see if they are accomplishing their intended outcomes.



**TIP #1:** Focusing on what matters most is a critical part of this model, and is often ignored. Schools rarely take time to determine what is not working. However, this is a must. We cannot just keep adding on new initiatives without stepping back and taking a systems wide view of *what needs to change or be eliminated*.

**Evaluating Structures:** Examples of school structures to collect data on:

- Advisory and homeroom structures
- AP and honors courses
- Grading and remediation policies
- Discipline procedures
- Absentee rates and attendance issues
- ESL / ELL policies and procedures

Based on 1A and 1B above, fill out the table below with the results of your school structure analysis:

<b>What Structures ARE working?</b>
<p>Structure can support the success of all students or can unintentionally disadvantage some students. As a result, it is critical to use the equity lens and the values as you evaluate structures. List out school structures that are working for students. Be sure to include why it is working and include specific data and evidence to show it is working. <i>Remember to think about the Equity Lens!</i></p>
<p>(A.) Ex. Traveling Academic Advisory (TAA) (delete) –TAA was implemented in the 2016-17 school year. Since then we have seen a decrease in failing term grades by 27%. TAA is a part of the regular daily advisory period schedule, but is offered every Tuesday and Thursday in an extended advisory (45 mins versus the regular 20 minutes). This program directly impacts academic outcomes and graduation rates by adding a more robust and explicit support system for all students during the school day.</p> <ul style="list-style-type: none"> <li>• Teachers work in small teams to help identify and target struggling students for TAA weekly.</li> <li>• Students can request a specific teacher through the TAA system, teachers can say yes or no depending on who they already have signed up</li> <li>• In the 16-17 school year, students made 1356 total TAA requests to see teachers. Of those requests, 47% came from non-white students.</li> <li>• In the 16-17 school year, failing term grades dropped by 27%</li> <li>• In the 16-17 school year, there were 23 fewer students required to go to summer school because of missing credits required for graduation.</li> </ul>

**STEP 1B: Continued**

**What Structures ARE working?**

Step 1B Continued (delete)

**Celebrate your schools' successes!** Take a moment to celebrate your schools' successful structures. There is rarely time to celebrate the successes in our schools. Take the time to acknowledge what is working to help increase student outcomes, celebrate those efforts and think about how these successful structures can be potentially leveraged in later steps of the Improvement Cycle.

**STEP 1B: Continued**

**What Structures ARE NOT working?**

List out each school structure. Be sure to include why it is NOT working and include specific data and evidence to show what is wrong with it. *Remember to think about the Equity Lens!*

(A.) Ex. (delete): Current AP Courses: 30% of total school population enrolled in AP, approximately 18% of enrollment is from non-white students. 78% of AP enrollment is from high SES student population. Currently a 55% pass rate on AP exams overall.

- Using AP enrollment data, only 18% of students who qualify for FRL ever enroll in AP course.
- Pass rate for students of color and low-SES students below approx. 34% according to school AP data.





**1C. Acknowledging Gaps:** Now, looking back at the previous Examining Structures work (1A, B, & C), use that information, and the data you've collected to identify gaps and problem areas that may be negatively affecting your school's graduation rate. *It is critical to use the **Equity Lens** here to look back at data, structures and successes in helping to determine gaps.* Record these gaps below:

<b>Gap</b>	<b>Why do you believe this gap exists?</b>	<b>How do you know? Use evidence and data</b>
(A.) Ex. (delete): Poor momentum and support for potential students in AP courses, specifically our diverse students	A. Not enough students understand benefit of AP courses for college-going students. B. Not enough support for when students enroll in our AP courses.	No PRE-AP structure in schools. No AP-specific school-wide support mechanisms for ALL potential AP students. Evidence: <ul style="list-style-type: none"> <li>• Student and Teacher climate surveys feedback from 2016-17</li> <li>• Only 18% of AP enrollment from diverse non-white students</li> <li>• Poor AP Exam results (55% pass rate).</li> </ul>

**1D. Identify your Focus Area (FA):** The analysis that you have previously done in 1A-1D will help you identify your *Focus Area*. It is critical you ensure that there is a consensus among your school administration, leadership team and staff on the *Focus Area*.

**Write it up so it is clear and concise for all staff.**

<b>TIP</b> 	<p><b>TIP #2:</b> Ensure understanding of the <i>Focus Area</i> by writing it up and having faculty members write clarifying questions. You should revise the <i>Focus Area</i> by listening to the questions, making sure they are all answered and addressed and clarified as needed, and then editing the <i>Focus Area</i> as appropriate.</p>
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<b>TIP</b> 	<p><b>TIP #3:</b> The ORSN suggests only identifying and addressing one <i>Focus Area</i> per school year, and no more than three. Some <i>Focus Areas</i> may take more than one school year to tackle, be patient, this is about addressing long-term issues within your school, not winning a race.</p>
---	--

Write out the Focus Area for the upcoming school year. Example - (delete):


During the 2019-2020 school year, our focus area will be on increasing enrollment of diverse and underserved students into AP courses across content areas, and in implementing a new support system for all AP students to help increase the success rate for those who take the corresponding AP exam(s).

Have school administration approved the *Focus Area*?

YES NO

Was school administration involved in the determination of the *Focus Area*?

YES NO

<b>STEP TWO</b> 	<p><b>Research:</b> Researching and generating goals to support your <i>Focus Area</i> to accelerate excellence.</p>
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**2A. Researching Potential Goals that Address the Focus Area:** Now that data has been collected and analyzed, and a *Focus Area* has been identified, it is time to research and generate goals to help address the *Focus Area*. There are a number of ways to research goals. Two examples include:

- **Completing a literature review on the *Focus Area***
- **Identifying schools that are successful in the area of your *Focus Area***

**What is a Literature Review?** In its broadest form, a Literature Review is the process of performing a search, collection, review and overview analysis of evidence-based sources (research and literature) on your particular topic (*Focus Area* in this case) to demonstrate a mastery of understanding. For more thorough information on Literature Reviews go [HERE](#) and [HERE](#).

**STEP 2A: Continued**

**Complete a literature review:** You and your leadership team can divide resources to be sourced and read, with each member summarizing key findings from their resources and sharing them with the group, potentially using a common shared digital document. You could also decide to have the entire staff participate with the search, reading and summarizing resources to help determine potential evidence-based goals for your *Focus Area*. Some examples of high-quality evidence-based and peer reviewed resources:


**The Education Resources Information Center**  
 From the Institute of Education Sciences (IES)  
<https://eric.ed.gov/>


**What Works Clearinghouse (IES WWC)**  
 From the Institute of Education Sciences (IES)  
<https://ies.ed.gov/ncee/wwc/>

**The Division of Behavioral and Social Sciences and Education**  
 From the National Academies Press (NASEM)  
<https://bit.ly/2L2a2Og>

**Identify Schools Successful in your Focus Area:** Try to find comparable schools that are successful in your *Focus Area*. Locate another school with similar demographics that have had success in your *Focus Area*. Work with them by visiting the school and building a relationship. You should strategically appoint members from your school who will make the visit(s). The following criteria can help you identify who should be on the team:

- School leaders / Administration
- Faculty members and staff that represent a wide range of programs / departments
- Faculty members and staff who will gain understanding from seeing a program in action
- Faculty members and staff that have experience in the *Focus Area* and who are likely integral to the planning, development and implementation of the *Action Plan*
- Champions for equity

<b>TIP</b> 	<b>TIP #4:</b> Generate a list of questions before the visit so you can get them answered during your time at the school. Ask for any reports or information they may have published in the public sphere regarding their related work ahead of time so you can be prepared to ask them deeper questions on your visits.
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<b>TIP</b> 	<b>TIP #5:</b> Find evidence-based resources. Please feel free to reach out to the ORSN program staff at the University of Oregon, and the ORSN network of expert educators, to assist and guide you through the process if a literature review is an unfamiliar concept or you cannot access resources because of a paywall issue.
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We collaboratively researched potential solutions as a team	YES <input type="checkbox"/>	NO <input type="checkbox"/>
We completed a Literature Review and used evidence-based resources	YES <input type="checkbox"/>	NO <input type="checkbox"/>
We found a school with similar demographics who successfully addressed a similar <i>Focus Area</i>	YES <input type="checkbox"/>	NO <input type="checkbox"/>

## STEP 2A: Continued

### Narrative results of our collaborative researching of potential solutions:

Example - (delete): We completed a very comprehensive literature review on Advanced Placement and how we could work to improve access and enrollment to our existing AP courses and how we could create a support structure for all AP students. We did not find a similar school who has tackled a focus area such as ours. We will keep looking for one as we continue the work this year. We utilized numerous resources, including the following two evidence-based reports:

- A Case Study of the Advanced Placement Program: Eliminating the Access, Equity, and Participation Gap by Mandy Yearby (2017) from [eric.ed.gov](http://eric.ed.gov)
- Successful K-12 STEM Education: Identifying Effective Approaches in Science, Technology, Engineering, and Mathematics from NASEM (2011)

Our collaborative Literature Review Document can be found at: [www.somewebsite.com](http://www.somewebsite.com)

**2B. Collaborative Research and Generating Goals to Address Focus Area:** Using all of the gathered data, resources and results from the work of 1A through 2A, meet as a leadership team to discuss findings in order to brainstorm potential goals that directly address the determined *Focus Area*. **Remember the Equity Lens.** Run potential goals through the lens, keep what is appropriate. Continually run the potential goals by the leadership team and stakeholders for input.

**2C. Determine and Define Goals that Support Focus Area and Help Accelerate Excellence:** The list of defined goals should be prioritized by the whole staff based on a combination of school and resource readiness, and how great a positive change the actions may have on student achievement and graduation rates. Collectively create *Focus Area* Goals. *Include sources from data collection and evidence-based research as often as possible.*

**Goal Setting:** When determining your goals, think about following the simple goal setting steps from the seminal work of Dr. Edwin Locke and Dr. Gary Latham. Their work is about the Theory of Goal Setting and Task Performance. In basic form, it includes five components: **Clarity, Challenge, Commitment, Feedback, and Task Complexity** (1990).

**Clarity:** Set clear goals that use specific and measurable standards. Think about using SMART goals: Specific (simple & significant), Measurable (quantitative), Achievable (realistic), Relevant (directly related to the *Focus Area*), Time-Limited.

**Challenge:** Set the goals to be realistically challenging, something attainable in the time frame allotted. Unattainable goals will only hinder motivated stakeholders.

**Commitment:** The harder the goal, the more commitment is required. Commitment from school leadership is absolutely necessary. Goals need to be positively reinforced to build commitment from a weary or fatigued staff.

**Feedback:** Staff and stakeholder feedback is important in building commitment. It creates opportunities to clarify expectations, adjust goal difficulty, and gain recognition.

**Task Complexity:** More complex tasks require more time and support from leadership.

10

**STEP 2C: Continued**

**TIP**



**TIP #6: Engage your staff.** It is important for the leadership team to engage the rest of the staff, so they have ownership of the goals and strategies that follow. Once the leadership team has generated potential goals to address the *Focus Area*, share the process you went through and discuss why you are proposing them. Allow the rest of the staff opportunities for input, update your goals accordingly.

**Define Focus Area Goals that Help Accelerate School Excellence & Increase Graduation:**

Example - (delete):

Focus Area: During the 2019-2020 school year, our focus area will be on increasing enrollment of diverse and underserved students into AP courses across content areas, and in implementing a new support system for all AP students to help increase the success rate for those who take the corresponding AP exam(s).

2019 - 2020 Goals that Directly Address Focus Area:

Goal 1: Increase enrollment of diverse and underserved students into AP courses by 40% over the next 3 years.

Goal 2: Support ALL students enrolled in AP courses to help increase AP exam achievement, with the goal of increasing AP exam pass rate by 30% over the next 3 years.

**Remember:** It is important to not take on too much in a given school year, we advise one *Focus Area* with no more than 3-5 goals in a given school year.

**STEP 2C: Continued**

**Defined Focus Area Goals Continued – Remember to include goal measurement methods**

Add Focus Area Goals and measurement methods here.

## STEP THREE



**Planning:** Taking it to the next level by developing an *Action Plan* with evidence-based strategies.

**3A. Creating an Action Plan based on your Focus Area and Goals:** It is now time to take the goals addressing your *Focus Area*, and combine them together with evidence-based strategies you define, based on your collected school data and Literature Review knowledge from Step 2. Your completed *Action Plan* will include; your goals; the key strategies to achieve those goals; the person(s) responsible; the deadline; the deliverables; and a progress report. The *Action Plan* should have full consensus of the school leadership team and support from the entire staff. We have provided information about each component of the plan.

**Goal:** Each year you will have numerous goals that directly address your *Focus Area*. Each goal will have multiple strategies for achieve that particular goal.

**Strategy:** Creating effective strategies, based on the evidence-based research from the Literature Review in Step 2 is critically important in helping to reach your goals. The strategies should be realistic, achievable, and have the support of all involved. Each strategy must help achieve the goal so it is always listed below the goal in the *Action Plan* (starting on page 13).

**Person Responsible:** This is the group of people responsible to achieve the strategy. It is critically important that you have one person whose job is to ensure that the work is all completed. This is the person who organizes the group and has bottom line responsible to for ensuring that the work is completed.

**Deadlines:** This is the date by which you will complete the initial strategy implementation and/or deliverables.

**Deliverable:** This is the list of items that document that you have completed the initial strategy implementation.

**Progress Report:** For more complex and long-term goals and strategies, the deliverables may be finished farther down the timeline. A Progress report allows a check to be in place in the interim to ensure appropriate progress is being made towards the deadline.

### TIP



**TIP #7:** Full staff and school administration buy-in for all steps is critical. At each step think about how you can zigzag between the leadership team and the full staff to obtain feedback on the *Action Plan* and its strategies. It is also important to communicate with students and other stakeholders at key points along the way.

**IMPORTANT:** Whether you use the included format starting on page 13, or a separate document, you need to include the components defined here in Step 3A in a similar format.

**ACTION PLAN**

Focus Area for 2019-2020 School Year: (delete all) - Our focus area will be on increasing enrollment of diverse and underserved students into AP courses across content areas, and in implementing a new support system for all AP students to help increase the success rate for those who take the corresponding AP exam(s).

<b>Goal:</b>	Goal 1: Increase enrollment of diverse and underserved students into AP courses by 40% over the next 3 years. (DELETE)		
<b>Strategy:</b>	Strategy 1 (G1S1): Create vertical alignment workgroup with feeder middle school counselors to help identify diverse and underserved students who should be targeted for early AP / Honors coursework Freshman and / or Sophomore year. (DELETE)		
<b>Steps:</b>	<ul style="list-style-type: none"> <li>• Work with HS &amp; MS Leadership to agree on vertical alignment workgroup and contract time etc.</li> <li>• Identify workgroup members and meeting logistics</li> <li>• Determine meeting times, availability, and calendar</li> </ul> (DELETE)		
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>
Add here.	(A) 1st meeting by 9/13/2019  (B) New enrollments by 2nd term	Add here.	(A) Follow up report on workgroup (10-1-19)  (B) Follow up report on enrollments (12-19-19)

<b>Goal:</b>	Goal 1 CONTINUED: Increase enrollment of diverse and underserved students into AP courses by 40% over the next 3 years.		
<b>Strategy:</b>	Strategy 2 (G1S2): High school administration and counseling staff form workgroup created for school-wide data analysis to target diverse and underserved students who are not currently enrolled in AP coursework to approach about enrolling in AP courses in next available term.		
<b>Steps:</b>	Add here.		
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>
Add here.	Add here.	Add here.	Add here.



<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

<b>Goal:</b>			
<b>Strategy:</b>			
<b>Steps:</b>			
<b>Person(s) Responsible:</b>	<b>Deadline:</b>	<b>Deliverable:</b>	<b>Progress Report:</b>

**You have completed your *Action Plan* – congratulations!** Now you need to ensure that it is successfully implemented by providing effective professional development.

## STEP FOUR



**Implementing the *Action Plan*:** Initiating strategies, including Professional Development (PD) and Field-Initiated Research, to achieve *Focus Area* goals.

**Developing Effective Professional Development:** The Leadership Team and an RSN partner, working with a team of expert UO faculty, collaboratively develop effective professional development to support the evidence-based strategies defined in the *Action Plan* from Step 3. Research shows that much of the teacher professional development carried out across the country is ineffective because it does not use evidence-based best-practices, expert support and collaboration, or sustained implementation cycles. RSN Improvement Model addresses these flaws by working to develop and deliver effective professional development that includes innovative evidence-based teacher-driven content developed by experienced practitioners in coordination with expert faculty.

**IMPORTANT:** At the end of Step 4, on page 19, we have provided you a synthesis of effective professional development from leading topic-area researchers and scholars. *Please use this when developing both the professional development content as well as the year-long PD calendar plan.*

**Field Initiated Research:** Your strategies should be based on evidence-based practices or emerging best practices. Some of the goals and their subsequent strategies may call for stand-alone research to determine the way in which they are influencing the *Focus Area* and, ultimately, student outcomes and graduation rates. RSN & UO partners will help you with field initiated research when appropriate.

**4A. Initiating Strategies:** As the *Action Plan* is finalized, with all appropriate stakeholders on-board, start implementing strategies according to the plan's timeline. This includes the steps for preliminary Professional Development delivery and Field Initiated Research.

**4B. Identify Professional Development (PD) Topics Based on Goals and Strategies:** All PD content should be evidence-based and explicitly linked to the *Action Plan's* goals and strategies from *Step 1 and Step 2*. PD content created to help staff meet goals and strategies should have a clear and direct connection to the identified *Focus Area*. The delivery methods for how PD in service is delivered should also be evidence-based.

**IMPORTANT:** It is critical to use evidence-based practices for both PD content development and delivery. Please RSN network COE expertise when needed regarding this step.

### TIP



**TIP #8:** Based on our synthesis of evidence-based best practices in PD, we would suggest that, at a minimum, your PD has (A) strong school-leadership support, (B) is delivered by subject-matter specific staff and is focused on specific content for each subject matter, when possible (C) and is engaging with plenty of opportunity for PD application and discussion.

**4C. Equity and Strengths Based Thinking:** All PD topics should be created with an emphasis on acknowledging and utilizing teacher, staff and student strengths. Continually think back to the Equity Lens and how PD topics are shaped by it.

**4D. Organizing Professional Development:** Determine existing staff expertise and experience. Determine what knowledge, experience, and expertise current leadership and staff have, and may need to learn, in order to tackle the development of upcoming PD. This may be done through a whole-staff discussion, or a quick staff survey. Determine what expertise will be needed that staff currently does not have. Use ORSN network COE faculty for help.

**4E. Delegate PD Topics:** Based on work from *Steps 4A - 4E* delegate PD content topics to appropriate staff and stakeholders for them to start researching and creating the PD content.

**IMPORTANT:** All PD content created needs to be evidence-based, sourced from reliable institutions, researchers and practitioners that are considered experts in the particular field. Examples would include: Well-regarded institutions of higher education, government educational agencies, educational non-profit organizations, and credentialed researchers and practitioners with lengthy histories of research and practice in the specified topic area. Please reach out to ORSN network if you need help identifying or accessing high quality evidence-based resources.

**4F. A Year-Long Professional Development Calendar:** With Leadership Team input, create a year-long Professional Development calendar that incorporates all required strategies from the *Action Plan* developed. This calendar is on page 20.

**TIP**



**TIP #9:** Current evidence says that an ideal year-long PD calendar will include: (A) Initial PD and skill building at the start of the school year, with a possible summer skill-building type of teacher academy, (B) a continual Professional Learning Community (PLC), (C) Instructional Coaching, and (D) data collection. The ORSN has a growing online PLC community that your school may be able to plug into to get a quick jump start.

**4G. Implementing Professional Development:** Implement PD with fidelity according to the PD calendar on page 20, and with close collaboration ORSN faculty, and potential COE faculty assistance.

**IMPORTANT:** See the *Evidence-Based Best PD Practices*, on page 19, for a list of evidence-based best practices in professional development regarding how to shape your year-long PD calendar. This is a cheat sheet of many high quality meta analyses focused on PD. While far from complete, it is short guide on how to incorporate powerful PD into your school.

**4H. Launch the Action Plan:** Now that you have a complete *Action Plan* that includes *Focus Area* evidence-based strategies, accompanying Professional Development, and potential Field-Initiated Research projects, begin the implementation of all of these steps and strategies. Be sure to collect appropriate data along the way and document progress as much as possible. Please ask for assistance from the greater ORSN when required for data collection.

## ORSN Improvement Model: Evidence-Based Best PD Practices

**I. Strong School Leadership Support:** Strong, clear and continual support from school leadership is critical (CESE.AU, 2014).

- Strong leadership promotes and participates in whole-school PD (CESE.AU, 2014).
- Leadership promotes clear achievable goals based on data and evidence (CESE.AU, 2014).

**II. Subject-Matter Specific:** Regardless of the PD topic, evidence shows that PD should be delivered to teachers by applicable content area (Desimone, 2002; Garet et al., 2001).

- Subject-specific PD works best when in conjunction with all other evidence-based aspects of good PD (Kennedy, 2016).
- Even better when subject-specific PD can be delivered BY subject-matter experts (Hill, 2009). ORSN, this could mean the Courtesy Assistant Clinical Professor, site leadership, ORSN expert faculty, and UO expert faculty.
- Subject-specific common scoring and grading are two great tools for subject-specific PD (Desimone, 2009).

**III. Active Engagement:** Practitioners should be actively engaged in the PD and not just sitting in the audience passively listening (Desimone et al., 2002).

- Teachers should be treated as colleagues testing new pedagogy and content, not as somebody who has done something wrong (Kennedy, 2016).

**IV. Intensity:** Though not absolute, evidence shows more time usually equates to better PD implementation, especially when coaching, PLCs, and educators are actively engaged, with time to plan (Yoon et al., 2007; CESE.AU, 2014; Kennedy, 2016).

- 30 - 100 hours is much more effective than PD delivered in less than 30 hours over the course of an entire school year (CESE.AU, 2014), essentially more time in high-quality PD equals greater change in teacher implementation and student achievement (Timperley, 2007).

**V. Sustained:** More sustained PD implementation time equals greater teacher implementation and larger student outcomes, especially when the PD includes active engagement, coaching, and PLCs (Kennedy, 2016).

- Summer workshops can be effective in starting year-long PD cycles (Yoon et al. 2007).
- Ideally, a 12-month+ cycle is more effective (Alton-Lee, 2011), The ORSN Improvement Cycle is meant to take place over one school year.
- PD that takes place over a longer time span will likely include learning opportunities required for educators to integrate new knowledge into classroom practice (Brown, 2004).

**IV. Coaching:** Literature shows that coaching and mentoring supports the implementation of new curriculum and instructional practices for teachers, and that this type of support can be critical to successful long-term PD implementation (Darling-Hammond, Hyer & Madelyn Gardner, 2017).

- Coaching works better when it is specific feedback tailored to the individual teacher and classroom (Kraft, Blazar & Hogan, 2017).
- Mentoring and coaching help teachers identify barriers and create strategies to overcome them (Ottoson, 1997).
- PLCs work best when teachers are given research findings to think about, a discussion leader poses questions and keeps conversations on target (Kennedy, 2016) and are sustained over time, especially when they may have an online component (Desimone et al., 2002).

**Year-Long Professional Development Calendar**

**IMPORTANT:** (A) Be sure to include goal and strategy PD addresses (e.g. GIS2 for Goal 1, Strategy 2). (B) Be sure to include separate details for when PD is being developed, deadlines and who is responsible. In addition, include details for who is responsible for the PD delivery, and when.

JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE

**Additional Notes:**

Add here.

**STEP  
FIVE**



**Evaluation:** Analysis of *Focus Area* data, revising and repeating the cycle or starting a new one.

**5A. Data Collection and Analysis:** Localized and contextualized data collection and analysis will be somewhat dependent on partner schoolsites and their *Focus Area*. Data collection may include simple faculty survey and discussion data on PD implementation, and broader stakeholder (student, parent, etc.) survey data related to PD implementation, such as school climate and engagement surveys. Changes in student academic and behavior outcomes will take time to develop, but eventually this data should be collected and analyzed as well.

**5B. Patience in Implementation:** Data collection and implementation analysis should focus on the identified goals and strategies of the *Action Plan*, its connected PD and any associated Field-Initiated Research Projects, not necessarily if they had any immediate student outcome impacts. Change takes time.

**5C. Continuous Revision:** Data collection and analysis should take place throughout PD implementation. This can include observational data of PD implementation in classrooms, teacher and student feedback and leadership team input.

**IMPORTANT:** Revise when necessary, do not continue to implement *Action Plan* components (PD, field-initiated research, strategies, etc.) that will not directly address the identified *Focus Area*.

**5D. End of Year Reflection:** At the end of the school year, with the *Action Plan* implementation completed, RSN leadership team needs to ask itself, “Has the *Focus Area* been adequately addressed.” Part of this determination process will involve looking at school data that builds up to graduation rates (as actual measurable change in overall school graduation rates may take several years) that should include:

**STUDENT DATA**

- Standardized test data (SBAC /PARCC /Etc.)
- Student attendance and discipline records
- Student grade point averages and core content grades
- Student absentee and chronic absentee rates
- Graduation rates
- Student climate /engagement survey data

**TEACHER DATA**

- Observational data on PD instructional implementation
- Teacher survey data

**If the answer is NO** – RSN Leadership Team needs to delve deeply into what went right, what went wrong, investigate, revise, make changes and repeat the cycle, starting with STEP 1.

**If the answer is YES** – RSN Leadership Team needs to determine what implemented actions need to continue into the future, celebrate the successes, and prepare to start RSN Improvement Cycle again with a new *Focus Area* as soon as possible for the upcoming year.



**End of Year Reflection:** Has the Focus Area been adequately addressed? *Use specific data.*  
**If NO** – Determine what went right, what went wrong, revise and repeat the Improvement Cycle.  
**If YES** – Determine what structures need to continue into the future, celebrate and prepare to start the Improvement Cycle again in the next school year.

Add here.

## References

- Alton-Lee, A. (2011). (Using) evidence for educational improvement. *Cambridge Journal of Education*, 41(3), 303-329.
- Brown, G. T. (2004). Teachers' conceptions of assessment: Implications for policy and professional development. *Assessment in Education: Principles, Policy & Practice*, 11(3), 301-318.
- Darling-Hammond, L., Hyster, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). *Effects of Professional Development on Teachers' Instruction: Results from a Three-Year Longitudinal Study*.
- Desimone, L. M. (2009). Improving Impact Studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures. *Educational Researcher*, 38(3), 181-199. <https://doi.org/10.3102/0013189X08331140>
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Hill, H. C. (2009). Fixing teacher professional development. *Phi Delta Kappan*, 90(7), 470-476.
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, 86(4), 945-980.
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88(4), 547-588.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Prentice-Hall, Inc.
- Ottoson, J. M. (1997). After the applause: Exploring multiple influences on application following an adult education program. *Adult Education Quarterly*, 47(2), 92-107.
- Rutledge, S., Cohen-Vogel, L., & Osborne-Lampkin, L. T. (2012). *Identifying the Characteristics of Effective High Schools: Report from Year One of the National Center on Scaling up Effective Schools*. Research Report. National Center on Scaling Up Effective Schools (NJ1).
- Timperley, H., Education Counts, & Iterative Best Evidence Synthesis (programme). (2007). *ND - Teacher professional learning and development: Best Evidence Synthesis Iteration (BES)*. Thorndon, Wellington: Education Counts.
- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. L. (2007). *Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement*. Issues & Answers. REL 2007-No. 033. Regional Educational Laboratory Southwest (NJ1).

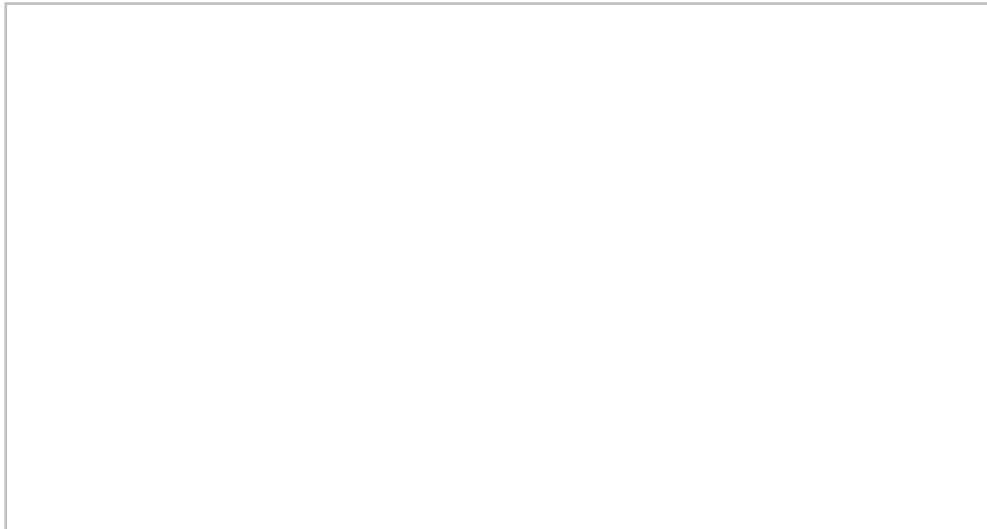
**Appendix**

Please attach any graphics, images or other documents you feel necessary for the completion of [REDACTED] RSN IM Guidebook:

Appendix 1 (EXAMPLE) Step 1B Working Structures Graphic Organizer



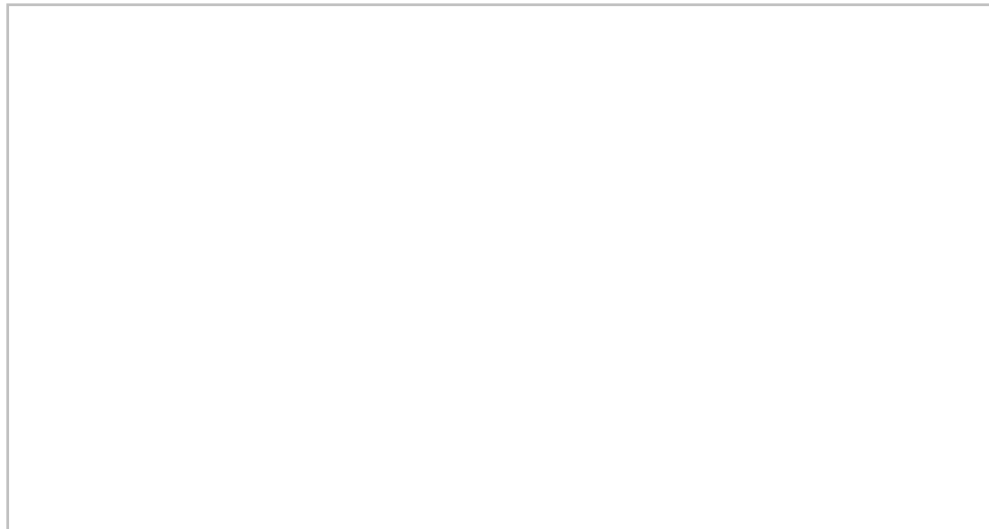
Appendix 2 (EXAMPLE) Step 1B NOT Working Structures Graphic Organizer



Appendix 1 (EXAMPLE) Step 1B Working Structures Graphic Organizer



Appendix 2 (EXAMPLE) Step 1B NOT Working Structures Graphic Organizer



## APPENDIX H

### VI.3 SHS CLASSROOM OBSERVATION DATA COLLECTION FORM

v1.3 SHS Classroom Observation Data Collection - #2 Student Engagement					
Teacher:		Subject:		Date:	Observer:
Five Dimensions of Teaching and Learning (from <i>Leading for Instruction &amp; Improvement</i> )					
<b>1. Purpose</b>	YES	NO	Description / Notes		
Essential Question visible					
Essential Question known by students					
Classroom learning is appropriately challenging					
Essential Question is aligned with standards					
<b>2. Student Engagement</b> ( <i>Beyond simple time-on-task checks</i> )		Description		Observed Tally (Y or N)	Total
<b>A. Intellectually Challenging Work</b>					
Ex: Primary source analysis, written explanation of math solution					
<b>B. Student Ownership Of Learning</b>					
Ex: Student driven project based learning w individual presentation					
<b>C. Equitable &amp; Purposeful Participation</b>					
Ex: Jigsaw, peer review based w rubric, mock trial w assigned roles					
<b>D. Frequent Review</b>					
Ex: Short check-in quiz w immediate / digital feedback, gallery walk					
<b>E. Multiple Learning Tasks</b>					
Ex: Scaffolded writing process (outline, review, draft & review)					
<b>F. Engaging &amp; Appropriate Material</b>					
Ex: Connected content to current events, project w student choice					
<b>G. Concepts clearly highlighted</b>					
Ex: Explicit instructions present, clearly connected to essen. quest.					
<b>H. Appropriate change-up / breaks</b>					
Ex: Multiple learning targets, I do / We do / You do					
<b>I. Relevance to students</b>					
Ex: Self-determined topics, field work, service learning, ethics / current events, industry / community audience, student voice					
<b>Student Talk</b> ( <i>Paying attention to the substance of what is said</i> )		Description		Observed Tally (Y or N)	Total
		Partner Talk (1 on 1 sustained)			
		Small-group Work (sustained)			
		Turn and Talk (2 minutes or less)			
		Think-Pair-Share style talk (solo > partner / group > class)			
		Talk Pushing for Deeper Learning (Socratic Seminar)			
		Talk is Activating Prior Knowledge (Quick review Q&A warmup)			
		Teacher to Class / Teacher to Student 1:1 Question & Answer			
		% Teacher Talk (Direct instruction / lecture to students) CIRCLE:			
		< 25%	25%	50%	75%
		100%			
<b>NOTES:</b>				<b>TOTAL</b>	
<b>DEPTH OF KNOWLEDGE (Circle the level that best applies)</b>					
<b>LEVEL 1: RECALL (Know / Remember)</b>			<b>LEVEL 2: USE OF SKILL / CONCEPT (Application)</b>		
<b>1</b>	Lower Order Thinking Skills: Describe, explain, giving examples, calculate, labeling, locating, listing		<b>2</b>	Lower Order Thinking Skills: Categorize, construct, distinguish, estimate, graph, solve	
<b>LEVEL 3: STRATEGIC THINKING (Analyze)</b>			<b>LEVEL 4: EXTENDED THINKING (Synthesize)</b>		
<b>3</b>	Higher Order Thinking Skills: Assess, cite evidence, conclude, critique, develop a theory / hypothesis, investigate, support		<b>4</b>	Higher Order Thinking Skills: Appraise, connect, create, design, judge, prove, report	
<b>NOTES:</b>					

## REFERENCES

- Adelman, H. S., & Taylor, L. (2007). Systemic change for school improvement. *Journal of educational and psychological consultation*, 17(1), 55-77.
- Allensworth, E. (2015). Dropout prevention: A previously intractable problem addressed through systems for monitoring and supporting students. In *Prevention science in school settings* (pp. 353-370). Springer, New York, NY.
- Allensworth, E., & Easton, J. Q. (2005). The on-track indicator as a predictor of high school graduation.
- Allensworth, E. M., & Easton, J. Q. (2007). What Matters for Staying On-Track and Graduating in Chicago Public High Schools: A Close Look at Course Grades, Failures, and Attendance in the Freshman Year. Research Report. *Consortium on Chicago School Research*.
- Allensworth, E. M., Gwynne, J. A., Moore, P., & De la Torre, M. (2014). Looking Forward to High School and College: Middle Grade Indicators of Readiness in Chicago Public Schools. University of Chicago Consortium on Chicago School Research. 1313 East 60th Street, Chicago, IL 60637.
- Allensworth, E. M., Healey, K., Gwynne, J. A., & Crespin, R. (2016). High School Graduation Rates through Two Decades of District Change: The Influence of Policies, Data Records, and Demographic Shifts. Research Report. *University of Chicago Consortium on School Research*.
- Anderson, J. R., & Feder, G. (2007). Agricultural extension. *Handbook of agricultural economics*, 3, 2343-2378.
- Anderson, K. L., Weimer, M., & Fuhs, M. W. (2020). Teacher fidelity to Conscious Discipline and children's executive function skills. *Early Childhood Research Quarterly*, 51, 14-25.
- Archibald, S., Coggshall, J. G., Croft, A., & Goe, L. (2011). High-Quality Professional Development for All Teachers: Effectively Allocating Resources. Research & Policy Brief. *National Comprehensive Center for Teacher Quality*.
- "Association for Supporting Qualitative Research ASQ." *Qualitative Content Analysis*, <https://qualitative-content-analysis.org/>.
- Beaver, J. K., & Weinbaum, E. H. (2012). Measuring school capacity, maximizing school improvement.
- Bernhardt, P. E. (2013). The Advancement Via Individual Determination (AVID) Program: Providing Cultural Capital and College Access to Low-Income Students. *School Community Journal*, 23(1), 203-222.

- Birkhaeuser, D., Evenson, R. E., & Feder, G. (1991). The economic impact of agricultural extension: A review. *Economic development and cultural change*, 39(3), 607-650.
- Blackwell, W. H., & Rossetti, Z. S. (2014). The development of individualized education programs: Where have we been and where should we go now? *Sage Open*, 4(2), 2158244014530411.
- Blanchard, C., Livet, M., Ward, C., Sorge, L., Sorensen, T. D., & McClurg, M. R. (2017). The active implementation frameworks: a roadmap for advancing implementation of comprehensive medication management in primary care. *Research in Social and Administrative Pharmacy*, 13(5), 922-929.
- Blase, K. A., Fixsen, D. L., Sims, B. J., & Ward, C. S. (2015). Implementation science: Changing hearts, minds, behavior, and systems to improve educational outcomes. *Oakland: The Wing Institute*.
- Boaz, A., & Davies, H. (Eds.). (2019). *What works now?: evidence-informed policy and practice*. Policy Press.
- Booth, J. L., Cooper, L. A., Donovan, M. S., Huyghe, A., Koedinger, K. R., & Paré-Blagojev, E. J. (2015). Design-based research within the constraints of practice: AlgebraByExample. *Journal of Education for Students Placed at Risk (JESPAR)*, 20(1-2), 79-100.
- Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston, MA: Pearson Education, Inc.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative research journal*, 9(2), 27.
- Brady, D. A., Tzortzopoulos, P., & Rooke, J. (2011). An examination of the barriers to last planner implementation.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Brown-Johnson, C., Shaw, J. G., Safaeinili, N., Chan, G. K., Mahoney, M., Asch, S., & Winget, M. (2019). Role definition is key-Rapid qualitative ethnography findings from a team-based primary care transformation. *Learning health systems*, 3(3), e10188. <https://doi.org/10.1002/lrh2.10188>
- Brownson, R. C., Colditz, G. A., & Proctor, E. K. (2012). *Dissemination and Implementation Research in Health: Translating Science to Practice*.
- Bryk, A. S. (2010). Organizing schools for improvement. *Phi Delta Kappan*, 91(7), 23-30.

- Bryk, A. S., Bender Sebring, P., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: The University of Chicago Press.
- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better*. Harvard Education Press.
- Buller, J. L. (2013). *Positive academic leadership: How to stop putting out fires and start making a difference*. John Wiley & Sons.
- Cannata, M., Cohen-Vogel, L., & Sorum, M. (2017). Partnering for improvement: Improvement communities and their role in scale up. *Peabody Journal of Education*, 92(5), 569-588.
- “Carnegie Foundation.” *Carnegie Foundation for the Advancement of Teaching*, <https://www.carnegiefoundation.org/>.
- Caruth, G. D. (2013). Demystifying mixed methods research design: A review of the literature. *Online Submission*, 3(2), 112-122.
- Carver, R. H., & Nash, J. G. (2011). *Doing data analysis with SPSS: version 18.0*. Cengage Learning.
- Chatterjee, S., & Simonoff, J. S. (2013). *Handbook of regression analysis* (Vol. 5). John Wiley & Sons.
- Christensen, L. B., Johnson, B., & Turner (2015). *Research methods, design, and analysis*.
- Clyburn, G. M. (2013). Improving on the American dream: Mathematics pathways to student success. *Change: The Magazine of Higher Learning*, 45(5), 15-23.
- Cobb, P., Jackson, K., Henrick, E., & Smith, T. M. (2020). *Systems for instructional improvement: Creating coherence from the classroom to the district office*. Harvard Education Press.
- Coburn, C. E. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, 32(6), 3–12.
- Coburn, C. E., Honig, M. I., & Stein, M. K. (2009). What is the evidence on districts' use of evidence? In J. Bransford, L. Gomez, D. Lam, & N. Vye (Eds.) *Research and practice: Towards a reconciliation*. Cambridge: Harvard Educational Press.
- Coburn, C. E., & Penuel, W. R. (2016). Research–practice partnerships in education: Outcomes, dynamics, and open questions. *Educational Researcher*, 45(1), 48-54.
- Coburn, C. E., Penuel, W. R., & Geil, K. E. (2013). *Practice Partnerships: A Strategy for Leveraging Research for Educational Improvement in School Districts*. William T. Grant Foundation.



- Coburn, C. E., Penuel, W. R., & Geil, K. E. (2013). Research-practice partnerships: A strategy for leveraging research for educational improvement in school districts. *New York, NY: William T. Grant Foundation.*
- Coburn, C. E., & Stein, M. K. (2010). *Research and practice in education: Building alliances, bridging the divide.* Rowman & Littlefield Publishers.
- Cook, B. G., Smith, G. J., & Tankersley, M. (2012). Evidence-based practices in education.
- Cortiella, C. (2005). No Child Left Behind: Determining Appropriate Assessment Accommodations for Students with Disabilities. National Center for Learning Disabilities.
- Creswell, J. W. (2015). *30 Essential Skills for the Qualitative Researcher.* SAGE Publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications.
- Creswell, J. W., & Plano Clark, V. L. (2017). Designing and conducting mixed methods research (3rd ed.). Thousand Oaks, CA: Sage.
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of teacher education, 61*(1-2), 35-47.
- Darling-Hammond, L. (2015). *The flat world and education: How America's commitment to equity will determine our future.* Teachers College Press.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational evaluation and policy analysis, 24*(2), 81-112.
- Digest of Education Statistics: Public high school 4-year adjusted cohort graduation rate (ACGR), by selected student characteristics and state: 2010-11 through 2017-18. (n.d.). [https://nces.ed.gov/programs/digest/d19/tables/dt19\\_219.46.asp](https://nces.ed.gov/programs/digest/d19/tables/dt19_219.46.asp)
- DePaoli, J. L., Balfanz, R., Bridgeland, J., Atwell, M., & Ingram, E. S. (2016). Building a graduation: Progress and challenge in raising high school graduation rates. *Building a graduation: Progress and challenge in raising high school graduation rates*, 1-91.

- Dolle, J. R., Gomez, L. M., Russell, J. L., & Bryk, A. S. (2013). More than a network: Building professional communities for educational improvement. *National Society for the Study of Education Yearbook*, 112(2), 443-463.
- Donovan, M. S. (2017). Innovation and Induction Corridors: A Proposal for Integrating Research, Development, and Teacher Professional Preparation. *Strategic Education Research Partnership*.
- Dynarski, M., Clarke, L., Cobb, B., Finn, J., Rumberger, R., & Smink, J. (2008). Dropout Prevention. IES Practice Guide. NCEE 2008-4025. *National Center for Education Evaluation and Regional Assistance*.
- Employment status of the civilian population 25 years and over by educational attainment. (2019, May 03). Retrieved from <https://www.bls.gov/news.release/empsit.t04.htm>
- Evenson, R. E., & Pingali, P. (Eds.). (2007). *Handbook of Agricultural Economics. Volume 3: Agricultural Development: Farmers, Farm Production and Farm Markets. Handbooks in Economics Volume 18*. Elsevier Science & Technology.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., & Friedman, R. M. (2005). Implementation research: a synthesis of the literature.
- Fullan, M. (2007). *The new meaning of educational change*. Routledge.
- Fullan, M. (2009). Large-scale reform comes of age. *Journal of educational change*, 10(2-3), 101-113.
- Fullan, M. (2016). The elusive nature of whole system improvement in education. *Journal of Educational Change*, 17(4), 539-544.
- Gaglio, B., Shoup, J. A., & Glasgow, R. E. (2013). The RE-AIM framework: a systematic review of use over time. *American journal of public health*, 103(6), e38-e46.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American educational research journal*, 38(4), 915-945.
- Gaur, A. S., & Gaur, S. S. (2006). *Statistical methods for practice and research: A guide to data analysis using SPSS*. Sage.
- Gezelter, L. (2018). K-12 Education Reform, 1985-2017 Background Brief. Salem, Or: LEGISLATIVE POLICY AND RESEARCH OFFICE. Retrieved from <https://www.oregonlegislature.gov/lpro/Publications/Background-Brief-Education-Reform-2018.pdf>
- Gill, C. (2020) Oregon Statewide Report Card 2019-2020.

- Gill, C. (2019). Oregon Statewide Report Card 2018-2019.
- Glasgow, R. E., Harden, S. M., Gaglio, B., Rabin, B., Smith, M. L., Porter, G. C., & Estabrooks, P. A. (2019). RE-AIM planning and evaluation framework: adapting to new science and practice with a 20-year review. *Frontiers in public health, 7*, 64.
- Green, L. W., Ottoson, J. M., Garcia, C., & Hiatt, R. A. (2009). Diffusion theory and knowledge dissemination, utilization, and integration in public health. *Annual review of public health, 30*.
- Guskey, T. R. (2002). Does it make a difference? Evaluating professional development. *Educational leadership, 59*(6), 45.
- Hallinger, P., & Heck, R. H. (2011). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. In *International handbook of leadership for learning* (pp. 469-485). Springer.
- Hardesty, D. M., & Bearden, W. O. (2004). The use of expert judges in scale development: Implications for improving face validity of measures of unobservable constructs. *Journal of Business Research, 57*(2), 98-107.
- Hargreaves, A. (2005). Educational change takes ages: Life, career and generational factors in teachers' emotional responses to educational change. *Teaching and teacher Education, 21*(8), 967-983.
- Hargreaves, A., & Fullan, M. (2015). *Professional capital: Transforming teaching in every school*. Teachers College Press.
- Hargreaves, A., Lieberman, A., Fullan, M., & Hopkins, D. (Eds.). (2010). *Second international handbook of educational change* (Vol. 23). Springer Science & Business Media.
- Hill, H. C. (2009). Fixing teacher professional development. *Phi Delta Kappan, 90*(7), 470–476.
- Hoang, H., Huang, M., Sulcer, B., & Yesilyurt, S. (2017). Carnegie Math Pathways 2015-2016 Impact Report: A Five-Year Review. Carnegie Math Pathways Technical Report. *Carnegie Foundation for the Advancement of Teaching*.
- Honig, M. I., & Coburn, C. (2008). Evidence-based decision making in school district central offices: Toward a policy and research agenda. *Educational Policy, 22*(4), 578-608.
- Hopkins, D. (2001). *School improvement for real*. Psychology Press.
- Hourigan, R. (2011). Race to the Top: Implications for professional development in arts education. *Arts Education Policy Review, 112*, 60–64. <https://doi.org/10.1080/10632913.2011.546679>.

- Huang, M., & Yamada, H. (2017). Maintaining Success Rates: Does Statway® Sustain Its Impact as It Scales to New Classrooms and Institutions? Carnegie Math Pathways Technical Report. *Carnegie Foundation for the Advancement of Teaching*.
- Huberman, M. (1988). Teacher careers and school improvement. *Journal of curriculum studies*, 20(2), 119-132.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26.
- Jones, G. E., & Garforth, C. (1997). The history, development, and future of agricultural extension.
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.
- Kvale, S. (1996). *InterViews: an introduction to qualitative research interviewing*. Sage.
- Langley, G. J., Moen, R. D., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009). *The improvement guide: a practical approach to enhancing organizational performance*. John Wiley & Sons.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). Successful school leadership: What it is and how it influences student learning. *Research Report 800*.
- Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School leadership and management*, 28(1), 27-42.
- LeMahieu, P. G., Grunow, A., Baker, L., Nordstrum, L. E., & Gomez, L. M. (2017). Networked improvement communities. *Quality Assurance in Education*.
- Lewis, C. (2015). What is improvement science? Do we need it in education? *Educational Researcher*, 44(1), 54-61.
- Lewis, C. C., Fischer, S., Weiner, B. J., Stanick, C., Kim, M., & Martinez, R. G. (2015). Outcomes for implementation science: an enhanced systematic review of instruments using evidence-based rating criteria. *Implementation Science*, 10(1), 155.
- Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2002). Content analysis in mass communication: Assessment and reporting of intercoder reliability. *Human communication research*, 28(4), 587-604.
- Marks, M. L. (2004). Change Without Pain: How Managers Can Overcome Initiative Overload, Organizational Chaos, and Employee Burnout. *Personnel Psychology*, 57(4), 1062.

- Martin, W. G., & Gobstein, H. (2015). Generating a networked improvement community to improve secondary mathematics teacher preparation: Network leadership, organization, and operation. *Journal of Teacher Education*, 66(5), 482-493.
- Mayring, P. (2014). Qualitative content analysis: theoretical foundation, basic procedures and software solution. Klagenfurt. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173>.
- Mayring, P. (2020). QCAMap Step by Step – a Software Handbook. <https://Philipp.Mayring.At/>. [https://philipp-mayring-at.webnode.com/\\_files/200000012-abc67abc69/QCAmappingSoftwareHandbook.pdf](https://philipp-mayring-at.webnode.com/_files/200000012-abc67abc69/QCAmappingSoftwareHandbook.pdf)
- McIntosh, K., & Goodman, S. (2016). Integrated multi-tiered systems of support: Blending RTI and PBIS. Guilford Publications.
- Miech, E. J., Rattray, N. A., Flanagan, M. E., Damschroder, L., Schmid, A. A., & Damush, T. M. (2018). Inside help: an integrative review of champions in healthcare-related implementation. *SAGE open medicine*, 6, 2050312118773261.
- Murphy, J. (2013). The architecture of school improvement. *Journal of Educational Administration*.
- Nah, F. F. H., Zuckweiler, K. M., & Lee-Shang Lau, J. (2003). ERP implementation: chief information officers' perceptions of critical success factors. *International journal of Human-computer Interaction*, 16(1), 5-22.
- National Academies of Sciences, Engineering, and Medicine 2019. Monitoring Educational Equity. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25389>.
- National Academies of Sciences, Engineering, and Medicine 2019. The Promise of Adolescence: Realizing Opportunity for All Youth. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25388>.
- National Center for Education Statistics. (2021). Public High School Graduation Rates. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved [March 23, 2021], from <https://nces.ed.gov/programs/coe/indicator/coi>.
- Nunnally, J. C., and I. H. Bernstein. "Psychometric theory, (3rd Edition.) McGraw-Hill." New York (1994).
- Ogden, T., Bjørnebekk, G., Kjøbli, J., Patras, J., Christiansen, T., Taraldsen, K., & Tollefsen, N. (2012). Measurement of implementation components ten years after a nationwide introduction of empirically supported programs—a pilot study. *Implementation Science*, 7(1), 49.
- Ogden, T., & Fixsen, D. L. (2015). Implementation science. *Zeitschrift für Psychologie*.

- Oregon Department of Education, *At-A-Glance School and District Profiles*. (n.d.).  
<https://www.ode.state.or.us/data/reportcard/reports.aspx>
- Penuel, W. R., Briggs, D. C., Davidson, K. L., Herlihy, C., Sherer, D., Hill, H. C., ... & Allen, A. R. (2017). How school and district leaders access, perceive, and use research. *AERA Open*, 3(2), 2332858417705370.
- Penuel, W. R., & Gallagher, D. J. (2017). *Creating Research Practice Partnerships in Education*. Harvard Education Press. 8 Story Street First Floor, Cambridge, MA 02138.
- Pillay, H., Goddard, R., & Wilss, L. (2005). Well-being, burnout and competence: implications for teachers. *Australian journal of teacher education*.
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., ... & Hensley, M. (2011). Outcomes for implementation research: conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 65-76.
- Rabin, B. A., Brownson, R. C., Haire-Joshu, D., Kreuter, M. W., & Weaver, N. L. (2008). A glossary for dissemination and implementation research in health. *Journal of Public Health Management and Practice*, 14(2), 117-123.
- Reynolds, D. (2007). School effectiveness and school improvement (SESI): Links with the international standards/accountability agenda. In *International handbook of school effectiveness and improvement* (pp. 471-484). Springer, Dordrecht.
- Richards, K. A. R., Hemphill, M. A. & Templin, T. J. (2018). Personal and contextual factors related to teachers' experience with stress and burnout. *Teachers and Teaching: Theory and Practice*, 24(7), 768–787.
- Richardson, D. (2005). How can agricultural extension best harness ICTs to improve rural livelihoods in developing countries? *ICT in agriculture: Perspectives of technological innovation*, 6, 1-8.
- Richardson, D., & Memmott, K. (2017). State of Oregon The Oregon Department of Education Should Take Further Steps to Help Districts and High Schools Increase Oregon's Graduation Rate, Retrieved from  
<https://olis.leg.state.or.us/liz/2019R1/Downloads/CommitteeMeetingDocument/161509>
- Roderick, M., Kelley-Kemple, T., Johnson, D. W., & Beechum, N. O. (2014). *Preventable Failure: Improvements in Long-Term Outcomes When High Schools Focused on the Ninth Grade Year. Research Summary*. University of Chicago Consortium on Chicago School Research. 1313 East 60th Street, Chicago, IL 60637.

- Rogers, E. M. *Diffusion of Innovations*. (5th ed.) New York: Free Press, 2003.
- Rumschlag, K. E. (2017). Teacher burnout: A quantitative analysis of emotional exhaustion, personal accomplishment, and depersonalization. *International management review*, 13(1), 22-36.
- Ryan Jackson, Fixsen & Ward, C.S. (2018). *Four Domains for Rapid School Improvement: An Implementation Framework*. (2018). National Implementation Research Network, University of North Carolina at Chapel Hill.
- Ryan Jackson, K.M. & Ward, C.S. (2019). A Tale of Two States: Alignment and cohesion to close long-standing disparities in student outcomes. National Implementation Research Network, University of North Carolina at Chapel Hill.
- Ryan Jackson, K., Fixsen, D., Ward, C., Waldroup, A., Sullivan, V., Poquette, H., & Dodd, K. (2018). Accomplishing effective and durable change to support improved student outcomes. *Retrieved from National Implementation Research Network, University of North Carolina at Chapel Hill*.
- Sampson, U. K., Mensah, G. A., & Narula, J. (2015). *Implementation Research*. *Global Heart*, 10(1), 1.
- Sangster-Gormley, E., Martin-Misener, R., Downe-Wamboldt, B., & DiCenso, A. (2011). Factors affecting nurse practitioner role implementation in Canadian practice settings: an integrative review. *Journal of advanced nursing*, 67(6), 1178-1190.
- Scheerens, J. (2016). Meta-analyses of school and instructional effectiveness. In *Educational Effectiveness and Ineffectiveness* (pp. 175-223). Springer, Dordrecht.
- “SERP Institute.” *Bridging Research, Practice, Design in Education*, [www.serp institute.org/](http://www.serp institute.org/).
- Spillane, J. P. (2005). Distributed leadership. In *The educational forum* (Vol. 69, No. 2, pp. 143-150). Taylor & Francis Group.
- Spillane, J. P. (2006). Towards a theory of leadership practice: A distributed perspective. In *Rethinking Schooling* (pp. 208-242). Routledge.
- Stake, R. E. (2006). *Multiple case study analysis*. Guilford press.
- Swanson, B. E. (2006). Seminal Article Series: The Changing Role of Agricultural Extension in a Global Economy. *Urbana*, 51, 61801.
- Taylor, M. J., McNicholas, C., Nicolay, C., Darzi, A., Bell, D., & Reed, J. E. (2014). Systematic review of the application of the plan–do–study–act method to improve quality in healthcare. *BMJ Qual Saf*, 23(4), 290-298.

- Tseng, V. (2012). The Uses of Research in Policy and Practice and commentaries. *Social policy report*, 26(2), 1-24.
- Tseng, V. (2017). The next big leap for research-practice partnerships: Building and testing theories to improve research use. New York: William T. Grant Foundation.
- Tseng, V., Easton, J. Q., & Supplee, L. H. (2017). Research-practice partnerships: Building two-way streets of engagement. *Social Policy Report*, 30(4), 1-17.
- University of Oregon. (2018, January). Intergovernmental Agreement / Revenue Between [RHS district] and University of Oregon.
- US Department of Education, (2019). Overview and mission statement [webpage]. Retrieved from <https://www2.ed.gov/about/landing.jhtml>
- Wiggins, M., Jerrim, J., Tripney, J., Khatwa, M., & Gough, D. (2019). The RISE project: Evidence-informed school improvement. Education Endowment Foundation.
- Wilgus, G. (2019). From A Nation at Risk to No Child Left Behind to Race to the Top: The US Response to Global Competition. In *Investment in Early Childhood Education in a Globalized World* (pp. 107-158). Palgrave Macmillan, New York.
- Yin, R. K. (2017). *Case study research and applications: Design and methods*. Sage publications.
- Yoon, K. S., Duncan, T., Lee, S. W. Y., Scarloss, B., & Shapley, K. L. (2007). Reviewing the evidence on how teacher professional development affects student achievement. issues & answers. rel 2007-no. 033. *Regional Educational Laboratory Southwest (NJ1)*.
- Zaff, J. F., Donlan, A., Gunning, A., Anderson, S. E., McDermott, E., & Sedaca, M. (2017). Factors that promote high school graduation: A review of the literature. *Educational Psychology Review*, 29(3), 447-476.
- Zhao, Y. (2009). *Catching up or leading the way: American education in the age of globalization*. ASCD.