# ABSTRACT

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| Title of Dissertation: | THE USE OF THE EARLY WARNING INDICATOR REPORT TO IMPACT NINTH GRADE PROMOTION RATES IN A LARGE URBAN SCHOOL DISTRICT |
| | Tamika Nichole Tasby, Doctor of Education, 2016 |
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The purpose of this study was to examine how four high schools used an Early Warning Indicator Report (EWIR) to improve ninth grade promotion rates. Ninth grade on-time promotion is an early predictor of a student's likelihood to graduate (Bornsheuer, Polonyi, Andrews, Fore, & Onwuegbuzie, 2011; Leckrone & Griffith, 2006; Roderick, Kelley-Kemple, Johnson, & Beechum, 2014; Zvoch, 2006). The analysis revealed both similarities and differences in the ways that the four schools used the EWIR.

The research took place in a large urban school district in the Mid-Atlantic. Sixteen participants from four high schools and the district's central office voluntarily participated in face-to-face interviews. The researcher utilized a qualitative case study method to examine the implementation of the EWIR system in Wyatt School District. The interview data was transcribed and analyzed, along with district documents, to identify categories in this cross case analysis. Three primary themes emerged from the

data: (1) targeted school structures for EWIR implementation, (2) the EWIR identified necessary supports for students, and (3) the central office support for school staff. The findings revealed the various ways that the target schools implemented the EWIR in their buildings and the level of support that they received from the central office that aided them in using the EWIR to improve ninth grade promotion rates.

Based on the findings of this study, the researcher provided a number of key recommendations: (1) Districts should provide professional development to schools to ensure that schools have the support they need to implement the EWIR successfully; (2) There should be increased accountability from the central office for schools using the EWIR to identify impactful interventions for ninth graders; and (3) The district needs to assign dedicated central office staff to support the implementation of the EWIR in high schools across the district. As schools continue to face the challenge of improving ninth grade promotion rates, effective use of an Early Warning Indicator Report is recommended to provide school and district staff with data needed to impact overall student performance.

# THE USE OF THE EARLY WARNING INDICATOR REPORT TO IMPACT NINTH GRADE PROMOTION RATES IN A LARGE URBAN SCHOOL DISTRICT

By

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## Table of Contents

## List of Tables

## List of Figures

## Section 1: Introduction

### Problem Statement

Wyatt School District, a large urban school system in the Mid-Atlantic, faces a challenge of low promotion rates in the ninth grade. During school year (SY) 2013, the Wyatt School District student promotion rate from ninth to tenth grade was 75.5% (Mid-Atlantic State Department of Education [MASDE], 2014). Approximately 20% of Wyatt School District ninth graders are retained each year, and the majority of those students eventually fail to graduate from high school ("Wyatt School District Research Report 4," 2014). District leaders have assumed that the remaining 4-5% of ninth grade students that are neither promoted nor retained have dropped out or transferred to another school. In Wyatt School District, students who are promoted to the tenth grade on time are four times more likely to graduate on time than students who repeat ninth grade ("Wyatt School District 3," 2014).

Over the years, district leaders have attempted to address this problem of promotion; and between SY 2011 and SY 2013, schools experienced a positive increase of 8.4% in ninth grade promotion rates (MASDE, 2014). In SY 2014, ninth grade promotion became a system-wide priority, as district leaders mandated that principals adopt the goal of increasing ninth grade promotion rates by 5% over the rate achieved in SY 2013 ("Wyatt School District Research Report 4," 2014). Despite these efforts, ninth grade promotion remains a substantial problem due to low course performance, high absenteeism, and excessive disciplinary infractions ("Wyatt School District 1," 2014).

**Justification/Rationale**

Wyatt School District is not alone in the difficulties it faces in trying to increase ninth grade promotion rates. This issue is a challenge faced by school systems across the state and throughout the nation. The following sections provide local, statewide, and national contexts for the complexities that educators face in developing effective strategies for increasing promotion rates for ninth grade students.

**The national challenge.** In 2009, the average freshman graduation rate (AFGR) in the United States was 75.5% (Chapman, Laird, Ifill, & KewalRamani, 2011); this is notably lower than the target Mid-Atlantic state's rate of 80.1%. The AFGR represents the percentage of public high school students who graduate within four years (Chapman et al., 2011). Table 1 highlights the impact that dropping out of high school can have on a student's future. Research indicates that a correlation exists between the failure to graduate from high school and many other key factors in a student's life, including an increased propensity to commit crimes, reduced lifetime earnings, and fewer job opportunities ("High School Dropout Statistics," 2014).

When students do not graduate from high school, they face a number of additional challenges that can lead to long-term consequences. If a student does not advance to the tenth grade on time, "there is an increased likelihood of dropping out of high school" (Therriault, O'Cummings, Heppen, Yerhot, & Scala, 2013, p. 1). Data indicate that in the US, only 15% of students who repeat the ninth grade will graduate from high school ("High School Dropout Statistics," 2014). The rate of poverty for high school dropouts, ages 18-24, is 24-31% higher than the rate for their peers who graduated from high school (Aud, KewalRamani, & Frohlich, 2011). Researchers have concluded that

dropping out of school early may predict a student's likelihood to commit violent crime, have official arrests/police contact, and use alcohol and drugs (Henry, Knight, & Thornberry, 2012; Schweinhart, Montie, Xiang, Barnett, Belfield, & Nores, 2005). The entire trajectory of students' lives may change drastically simply because they were retained in the ninth grade.

Table 1

*High School Dropout Statistics in the United States, January 1, 2014*

| **High school dropout statistics (US)** | |
|---|---|
| Total number of high school dropouts annually | 3,030,000 |
| Percent of Americans with a high school diploma | 85.3 % |
| Percent of all dropouts that occur in the ninth grade | 36 % |
| Percent of students who repeat the ninth grade that go on to graduate | 15 % |
| Percent of students in the largest 50 U.S. cities that graduate high school | 59 % |
| Percent of US crimes that are committed by a high school dropout | 75 % |
| Amount of money a high school graduate will earn above that earned by a dropout [over their lifetime] | $260,000 |
| Percent of US jobs for which a high school dropout is not eligible | 90 % |

*Note*. Adapted from Statistics Brain. *Education Week-Children's Trends Database*. January 1, 2014. www.statisticbrain.com/high-school-dropout-statistics/.

Research indicates that, nationally, as with Wyatt School District, the ninth grade promotion rate serves as a strong predictor of graduation and dropout rates (Bornsheuer, Polonyi, Andrews, Fore, & Onwuegbuzie, 2011; Leckrone & Griffith, 2006; Roderick, Kelley-Kemple, Johnson, & Beechum, 2014; Zvoch, 2006). In Chicago Public Schools, the ninth grade cohort in 2009 demonstrated an increase in on-track promotion of 11%

over that of the previous year's cohort (Roderick et al., 2014). District leaders identified a direct correlation between this increase and the 13% increase in the on-time graduation rate of this same cohort in 2012 over that of the 2011 cohort (Roderick et al., 2014). Balfanz and Legters (2004) found that over the course of nine years, 1993-2002, "the number of high schools with the lowest levels of success in promoting freshmen to senior status on time (a strong correlate of high dropout and low graduation rates) increased by 75%, compared with only an 8% increase in the total number of high schools" (p. 5). This substantial increase in the number of schools with low levels of freshman promotion rates suggests the need for a change within high schools that addresses the specific needs of ninth grade students and increases their chance of successful, on-time promotion to the tenth grade.

**Challenges across the state.** Ninth grade promotion data highlight the larger challenge of losing students early in high school, which ultimately impacts state graduation rates and the students' future educational and vocational prospects. The MASDE (2014) explained that a promotion rate is the number of students who successfully transition from one grade level to the next. To advance from ninth to tenth grade in Wyatt School District, students must earn five credits, one of which must be for English ("Wyatt School District 7," 2013). Figure 1 presents a comparison of ninth grade promotion rates for Wyatt School District and the larger Mid-Atlantic state.

From 2010-2013, students in Wyatt School District were retained in the ninth grade at a rate ranging from 24.5-32.1% (MASDE, 2014). Conversely, the rate of retention in the state over this same period of time ranged from 13-14.6% (MASDE,

2014). Additionally, the state's ninth grade promotion rate increased 1.4% from SY 2011 to SY 2013, while Wyatt School District's promotion rate increased 8.4%.

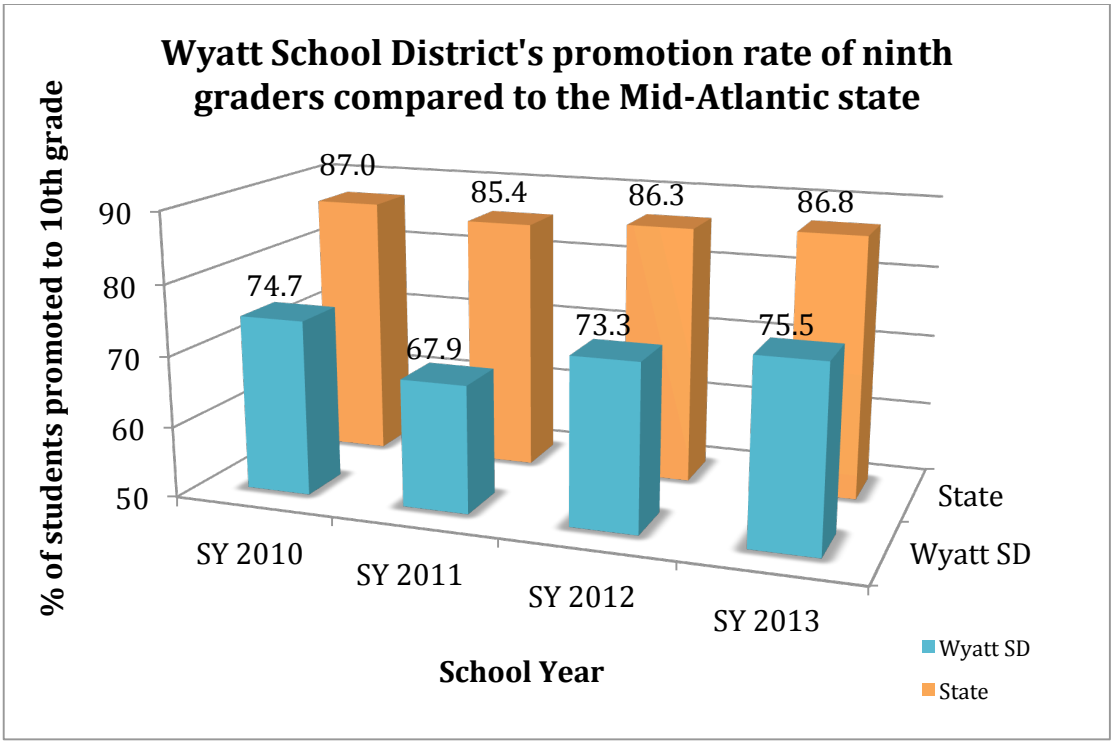



*Figure 1*. Comparison of state and district promotion rates. Wyatt School District's promotion rate of ninth graders compared to the Mid-Atlantic state. Adapted from Wyatt School District's and the state's *2006 to 2013 Promotion Rate for Grade 9*, all students (MASDE, 2014).

A number of researcher have identified a correlation between ninth grade promotion rates and high school graduation rates (Bornsheuer, Polonyi, Andrews, Fore, & Onwuegbuzie, 2011; Leckrone & Griffith, 2006; Roderick, Kelley-Kemple, Johnson, & Beechum, 2014; Zvoch, 2006). For SY 2012, the Mid-Atlantic state graduation rate was 83.6% (MASDE, 2015). According to the Alliance for Excellent Education (2013), if the graduation rate in this state were to increase to 90%, there would be a significant economic benefit to the state. The benefits include the following:

- 9,100 additional graduates,

- $146 million in increased annual earnings,
- $13 million in annual state and local tax revenues,
- 950 new jobs,
- $187 million increase in the gross state product,
- $424 million in increased home sales, and
- $14 million in increased auto sales (Alliance for Excellent Education, 2013).

Increasing the graduation rate would have a significant impact on both students and the Mid-Atlantic state. These data highlight the importance of ninth grade promotion and, subsequently, graduation rates at the state and district level.

**The challenge in Wyatt School District.** A number of factors may contribute to student retention in the ninth grade; and in Wyatt School District, system-wide policies may have had an impact on student progress. First, the district did not begin using ninth grade promotion rates to evaluate principals' performance 2013 ("Wyatt School District 3," 2013). A district representative also indicated that students seem unaware of promotion requirements. Discussions with approximately 87 ninth grade students in two high schools about their awareness of promotion requirements revealed a general lack of knowledge about the specific district requirements for promotion to the tenth grade (J. Thomas (pseudonym), personal communication, October 8, 2014). J. Thomas also noted that parents seemed uninformed of these requirements. Wyatt School District administrators have expressed the need to educate parents earlier about ninth grade promotion requirements (personal communication, August 13, 2014). The absence of principal evaluations regarding ninth grade promotions and the lack of awareness of

promotion requirements both may have had a notable impact on ninth grade promotion rates.

In recent years, Wyatt School District leaders have sought to understand and rectify these conditions. During SY 2014, over 200 Wyatt School District high school administrators and ninth graders identified as being at risk of retention participated in a focus group designed to identify the challenges students' face in ninth grade ("Wyatt School District 6," 2014). The students acknowledged that academic challenges, including low levels of content knowledge and lack of organizational skills, were impediments to advancement. The social challenges that they reported included accessing available resources and connecting to their school and community. Both students and administrators also noted a lack of highly-qualified teachers as a challenge ("Wyatt School District 6," 2014). These impediments seem consistent with those reported in the expansive literature on ninth grade retention and attrition. The following section will explore some of these findings.

**Critical Literature and Supportive Documents**

Over the years, several researchers have explored issues of retention and attrition among ninth grade students (Bottoms & Timberlake, 2007; Pharris-Ciurej, Hirschman, & Willhoft, 2012). According to Pharris-Ciurej et al. (2012), "Failure is not simply a poor grade on an exam, but being held back to repeat a grade and dropping out of school" (p. 17). As discussed previously, research has shown that students who repeat ninth grade are less likely to graduate from high school (Bottoms & Timberlake, 2007; Pharris-Ciurej, Hirschman, & Willhoft, 2012). Allensworth and Easton (2005), for example, analyzed the graduation rate of ninth graders in Chicago Public Schools who did not successfully

advance to the tenth grade on time. Of the 28% of students who were retained, half reenrolled in the ninth grade, and the researcher posited that the others dropped out altogether (Allensworth & Easton, 2005). Wheelock and Miao (2005) also found that students who repeated the ninth grade were unlikely to persist to twelfth grade and on to graduation.

Bottoms and Timberlake attributed a portion of lower ninth grade promotion rates to insufficient preparation in middle school (2007). Evidence of this finding is apparent in eighth grade proficiency scores on the National Assessment of Education Progress (NAEP), which is "The largest nationally representative and continuing assessment of what America's students know and can do in various subject areas" (U.S. Department of Education, 2015). In 2015, only 33% of eighth graders scored at or above the proficiency level in mathematics on the NAEP, while 34% scored at or above the proficiency level in reading (U.S. Department of Education, 2015). The lack of preparation in earlier grades impacts the attrition and retention of students during ninth grade and highlights the critical importance of identifying solutions to address this challenge.

**Strategies for increasing ninth grade promotion rates.** The literature has provided several strategies that may reduce ninth grade retention. For example, Herlihy (2007) suggested that to increase the ninth grade promotion rate, schools needed the following:

- an early identification system,
- a system focused on differentiating learning,
- assurance that teachers and administrators in low-performing schools have the capacity and support needed to support students, and

- curricular adjustments that make school more relevant to students' lives.

These proposed interventions serve as a framework for how Wyatt School District has attempted to address the challenges of low promotion rates of students to tenth grade.

Wyatt School District has adopted strategies from other school districts with similar challenges. In 2003, Chicago Public Schools began focusing on increasing ninth grade on-time promotion to improve graduation rates. The district implemented an on-time initiative across the system designed to inform struggling ninth grade students and parents about specific challenges students were experiencing and address the problem with a number of interventions. Ten years later, Roderick et al. (2014) concluded, "The on-track initiative reframed the problem of school dropout from an outcome that is outside the control of educators to one that can be managed through effective school-based strategies" (p. 9). According to the Assistant Superintendent, district leaders in Wyatt (a) examined the initiatives of other systems, (b) studied the long history of dropout prevention strategies used to promote and retain ninth graders, and (c) drew upon the prior efforts within the district to address this problem.

***Exploring the strategies of other systems***. Over the years, districts across the United States have implemented a wide range of interventions designed to address the ninth grade student retention challenge. A number of these efforts have involved instructional and programmatic initiatives. Hazel, Pfaff, Albanes, and Gallagher (2014) explored the efforts of one such school district. Strategies included a one-week orientation program for students during the summer prior to the first day of school, a zero period designed to reduce tardiness to first period classes, home visits for students who were frequently tardy, Saturday school for students who were not performing well, the

stoplight report –an early warning system, and the development of ninth grade academies (Hazel et al., 2014). The researchers concluded that the strategies were effective, but they also noted that the study only included data from one cohort and did not make any comparisons to previous cohorts. The majority of relevant studies suggested that these types of programmatic interventions, as opposed to solely instructional interventions, matter for ninth grade on-time promotion (Hazel et al., 2014; Henry et al., 2012; Kemple, Herlihy, & Smith, 2005; Pharris-Ciurej et al., 2012; Somers, Owens, & Piliawsky, 2009).

Hazel et al. (2014) found that instructional interventions do matter, however, as demonstrated by a middle-school-to-high-school Transitions Initiative, an effort by one urban school district in the Intermountain West region of the United States. According to Hazel et al., district leaders gave ninth graders more attention by changing the structure of the curriculum, enhancing the relationships students developed with adults in the school, conducting seminars to address students' soft skills, and offering extracurricular activities that were more interesting and engaging to students. The researchers concluded that the interventions that were in place as students transitioned into high school had a positive impact on ninth grade performance (Hazel et al., 2014).

***Drop-out prevention strategies.*** Somers et al. (2009) concluded that to increase ninth grade promotion rates, there should also be a focus on dropout prevention for ninth graders. According to Somers et al., dropout prevention programs should be holistic and must include a variety of initiatives like tutoring, personal development, summer enrichment, and parental involvement initiatives. The researchers found that implementing only one of these components did not provide the desired results (Somers et al., 2009). In fact, when they compared a group of ninth grade students who

participated in tutoring and enrichment to a similar group who did not participate in the intervention, there was no significant difference between the grade point averages of the two comparison groups (Somers et al., 2009). The findings suggested that schools and districts should address additional factors like students' personal motivation, homework accuracy and completion rates, class participation, school attendance, and the quality of relationships with teachers (Somers et al., 2009).

Talent Development High Schools in Philadelphia also implemented a unique approach to increasing ninth grade promotion rates. According to the Institute of Education Sciences (2007), Talent Development High Schools are a school reform model for restructuring large high schools with persistent attendance and discipline problems, poor student achievement, and high dropout rates. The model includes both structural and curriculum reforms (U.S. Department of Education, 2007, p. 1).

In Philadelphia, the Talent Development High School focused on increasing high school graduation rates and decreasing the number of students who dropped out of high school by enhancing students' personal interaction with teachers, increasing time in core academic subjects, and creating small communities of students who received instruction from one group of teachers within the school (Kemple et al., 2005). On average, this model resulted in the promotion of 40 additional students to the tenth grade at each school (Kemple et al., 2005). The schools also experienced an increase in attendance rates and the number of course credits earned by ninth grade students (Kemple et al., 2005).

Ellerbrock (2012) posited that grouping ninth grade students into four cohorts taught by the same team of teachers could create a family-like environment that could

positively impact ninth grade performance. At West High School, in Bakersfield, CA, for example, school leaders created freshman academies to target the lowest-performing students and provide them with additional academic and social interventions, academy teachers, and counselors to improve their school performance and ninth grade promotion rates (Action Learning Systems, 2011). By implementing these interventions, West High School increased its promotion rate by 3.1% during the first year of implementation and an additional 10% during the second year of implementation (Action Learning Systems, 2011).

Despite these examples of success, many researchers and practitioners continue to struggle to find the ideal approach to increase the ninth grade promotion rate. One promising strategy is the use of early warning predictors that can help schools identify students most at risk of being retained. Balganz (2009) and Johnson and Semmelroth (2010) found that a student's grade point average (GPA) prior to entering, and during, the ninth grade is an important factor in identifying the students most likely to be retained or to drop out of the ninth grade. Several researchers have agreed that knowledge of a student's GPA is an important predictor of success during the first year in high school; it is also a key factor in determining whether a student is at risk for dropping out of school (Allensworth & Easton, 2007; Bridgeland, Dilulio, & Morison, 2006; Henry et al., 2012; Pharris-Ciurej, Hirschman, & Willhoft, 2012).

Researchers have also find that prior standardized test scores, absenteeism or school attendance rates, grade-level promotion prior to ninth grade, and family poverty can all predict a student's performance in the ninth grade (Bridgeland et al., 2006; Bruce, Bridgeland, Fox, & Balfanz, 2011; Fall & Roberts, 2012; Henry et al., 2012; Pharris-

Ciurej et al., 2012). Henry et al. also found that disciplinary infractions in school and criminal history were additional predictors in some early warning systems, based on data from the Rochester Youth Development Study.

***Previous attempts to address the problem in Wyatt School District.*** During SY 2014, Wyatt School District formed a School Completion Taskforce, which provided a comprehensive and collaborative approach to facilitating school completion in the district (K. Smith (pseudonym), personal communication, December 20, 2013). Due to changes in district leadership and shifting priorities, the district never fully implemented the taskforce (B. Roberts (pseudonym), personal communication, January 2015). Increasing the promotion rate of ninth graders within Wyatt School District was one of the group's primary goals. The taskforce was not the district's first attempt to address this challenge. In SY 2011, district leaders created the Dropout Prevention Taskforce to develop a system-wide plan to meet the Annual Measurable Objectives (AMOs) established by the State Department of Education. The goal of the taskforce was to increase graduation rates and decrease dropout rates ("Wyatt School District 2," 2012). Increasing ninth grade promotion rates was one of their objectives, and the group established a goal of increasing rates of graduation by 5.5% and reducing dropout rates of students by 0.5% over three years.

The Wyatt School District Dropout Prevention Taskforce surveyed students within the district to gain a better understanding of why they were dropping out of school. Respondents identified several factors that aligned with those that the Editorial Projects in Education (EPE) Research Center had identified as reasons why students drop out of

school nationally ("Wyatt School District 2," 2012). The Wyatt School District's plan specifically listed the following contributing factors ("Wyatt School District 2", 2012):

- lack of interest in class (quality of instruction, curriculum, learning opportunities);
- lack of motivation (engagement in schooling);
- difficulty keeping up with the work (academic achievement, grades);
- excessive absences (attendance);
- economic pressures (family supports);
- family pressure (family supports);
- low expectations (academic achievement, grades);
- pregnancy (life events);
- gang involvement (community context); and
- incarceration (community context).

These challenges are all student-based issues. Later sections will address the system-level problems that have also impacted high school dropout and promotion rates.

Wyatt School District leaders were determined to improve student achievement, and to accomplish that goal, they placed a specific focus on ninth grade promotion rates. Over the past two decades, Wyatt School District instituted over 65 instructional interventions across the system ("Wyatt School District 8," 2014). Programmatic interventions implemented by the district have included the Hillside Work-Scholarship Connection, Career Academies, GEAR UP, and Summer Bridge Programs for rising ninth graders ("Wyatt School District 2," 2012). Each program has addressed a different area of student need, but all were designed to increase ninth grade promotion and

ultimately improve the school district's graduation rate. These programs, however, only represent components of a larger solution, rather than the holistic approach to increasing ninth grade promotion that Somers, Owens, and Piliawsky (2009) argued was essential to making a positive and lasting impact. Table 2 provides a summary of the Wyatt School District dropout prevention programs submitted to the State Department of Education.

Table 2

*Wyatt School District Interventions to Reduce High School Dropout Rates, 2011*

| Program/Initiatives | Target population |
|---|---|
| **Alternative Centers.** The centers are for students in grades 4-12 who could benefit from a structured program, designed to address academic, attendance and behavioral concerns that are impeding their progress in a traditional setting | The Alternative Center Program is designed for students who are need of an alternative educational program with support programs, parental involvement, and structured school procedures. Students referred or expelled from school may apply for admission to an alternative academy center in grades 4-12. Students who have been withdrawn or in process of being withdrawn may apply for admission to the CBC program |
| **Even Start Family Literacy for Advancing Boys Program.** The Even Start Family Literacy Program's Advancing Boys Centers are designed to promote the achievement in at-risk boys through parent and community involvement, staff development training sessions, mentoring and establishing "boy friendly" classroom environments. This program is an expansion of the unique Even Start community outreach model of cooperation and collaboration. The design focuses on providing a comprehensive family-centered educational program. | Students, parents, and staff in six elementary schools from Head Start through grade 2 |

| | |
|---|---|
| **Junior Reserves Officer's Training Corps (JROTC).** JROTC Programs provide students with safe, disciplined, and vibrant facilities that promote life-long learning and leadership skills. The blending of the academic and military themes intensify and broaden students' capabilities and reinforce their moral, mental, and physical character. JROTC programs are dedicated to the development of productive citizens and cadets who are eager to learn, college-bound and contributors to their community and the global society. | Secondary students in grades 9-12 |
| **Hillside Work-Scholarship Connection (HW-SC).** HW-SC is a program for secondary students in grades 7-9 that provides academic services, life and social skills development, youth employment training leading to job placement as well as post-secondary preparation and support. Youth Advocates in schools work with identified students and parents on program components like character development, decision-making and problem solving, health care education, and community service, in addition to a rigorous academic/intervention thrust. | Secondary students grades 7-9 |
| **Gaining Early Awareness & Readiness for Undergraduate Programs (GEAR UP).** GEAR UP provides a six-year grant allocated to states and/or business-college partners to provide services to middle/high school FARMS populations. This grant-funded program focuses on improving students' math performance and math teachers' training. Services include tutoring, mentoring, teacher training, curriculum enhancement, summer programs, college visits, counseling, and parental involvement activities. | Middle/high school low income (FARMS) students<br>Grades 8-12 |
| **Evening/Saturday High School.** Designed to help learners earn credits in the evening and/or on Saturdays, programs help students earn (a) recovery credit so they can graduate on time; (b) original credits so they can meet graduation requirements; and (c) CTE or ELL classes for students interested in gaining industry certification or English language acquisition. | Students who are concurrent students and transfers |

| | |
|---|---|
| **Summer Bridge Program for Rising 9th Grade Students.** This 1st-year program is designed for 9th graders entering high school who have not found success in middle school, and who would benefit from an academic Summer Enrichment Program. The program also facilitates a smooth transition from middle to high school. | Rising 9th grade students who have not been successful in middle school due to excessive absences, poor behavior and/or low academic achievement |
| **Summer High School Programs/Grades 9-12.** This initiative offers students the opportunity to earn a maximum of one credit during the day, and if approved by the base high school principal, one credit in the evening. | 9th-12th grade students who have failed courses required for graduation. |
| **HSA Satellite High School Program.** This program is a half credit and tuition free high school *Children Come First* initiative that provides an after school assessment course that helps students prepare for the state assessment. | 10th, 11th and 12th grade students who had failed at least one State Assessment in Algebra, Biology, English, Government |
| **Extended Learning Opportunities.** State Assessment Extended Learning Opportunities are a *Children Come First* initiative focused on providing after school non fee-based, non-credit enrichment classes for students who are first time test takers and required to pass the high school assessments. | Primarily 9th and 10th grade students taking the State Assessment (s) for the first time |
| **HSA Academic Intervention Classes.** A non-credit and tuition free high school initiative, these classes provide after school high school assessment course enrichment opportunities that help students prepare for the state assessment. | 11th and 12th grade students who had failed at least one State Assessment in Algebra, Biology, English, Government |
| **Incarcerated Youth Program.** Students who have been incarcerated under the age of 21 may receive educational services by Wyatt School District. | Students who have been charged as an adult and awaiting adjudication or placement |

*Note*. Retrieved from Dropout Prevention/School Completion Intervention/Resource Guide. MASDE, 2014.

Wyatt School District has addressed ninth grade promotion challenges with both instructional and programmatic interventions. Instructional interventions typically have

included planned, targeted, sustained, and goal-oriented strategies that schools incorporate into academic instruction (Howell, 2009). Programmatic interventions, alternately, include programs, services, strategies, policies, and activities that support student achievement and well-being both inside and outside of school (National Center on Safe Supportive Learning Environments, 2015). Both types of interventions address the various needs of students and allow schools to provide individualized and differentiated support for each student.

The *Wyatt School District Research Report 1* reported on the impact of the programmatic interventions that have taken place across the school district over the past 20 years. The report identified four major categories of programmatic interventions that the district has implemented during that time: (a) at-risk student identification, (b) summer support and remediation, (c) academic and emotional support programming, and (d) school restructuring ("Wyatt School District Research Report 1," 2014). A review of all related district initiatives revealed that Wyatt School District needed to focus resources on three of these interventions and do them well. The selected programs included Jumpstart to Graduation, ninth grade restructuring, and the Early Warning System ("Wyatt School District Research Report 1," 2014). *Jumpstart to Graduation* is a summer bridge program that helps students make a successful transition to the ninth grade, and *ninth grade restructuring* involved the development of career and ninth grade academies. The Early Warning System is a tool that determines the likelihood that students will progress from the ninth to the tenth grade on time and will be discussed later in greater detail.

The Wyatt School District Research Report 2 was developed by a major

foundation and noted that the district had changed its policy and programmatic focus to more community-based approaches to education ("Wyatt School District Research Report 2," 2013). The report attributed this change in policy to district leaders' understanding that positive interventions occurring earlier in a student's schooling correlated to increases in high school graduation rates ("Wyatt School District Research Report 2," 2013). The Early Warning System, Jumpstart to Graduation, and ninth grade restructuring all focused on intervening during the early years in high school (K. White (pseudonym), personal communication, February 19, 2014).

**Early warning data systems.** School districts and states across the country have implemented various early identification systems, also known as early warning data systems (Bruce et al., 2011; Herlihy, 2007). Metropolitan Nashville Public Schools, Chicago Public Schools, Knox County (TN) Schools, the School District of Philadelphia, and the Louisiana State Department of Education have all employed these systems in an effort to improve ninth grade promotion rates (Bruce et al., 2011). An early warning data system provides a way for schools to identify students who are at a high risk of dropping out based on various factors. The system works by evaluating student data that schools regularly collect (Heppen & Therriault, 2008).

***Chicago.*** Henry et al. (2012) explained that early warning systems utilized five components to assess risk: (a) standardized test scores, (b) attendance, (c) disciplinary actions, (d) GPA, and (e) previous grade retention. The researchers posited that this data could help school leaders identify students at risk of retention and develop appropriate interventions. Henry et al. used data from the Rochester Youth Development Study to evaluate academic and behavioral information for students in eighth and ninth grades and

identify a relationship between those five components and future school performance. The researchers concluded that a strong relationship existed between academic and behavioral data for eighth and ninth graders (including ninth grade promotion rates) and the number of high school dropouts (Henry et al., 2012).

Bruce et al. (2011) found that the early intervention system proved an effective means of increasing ninth grade promotion rates in Chicago Public Schools (CPS). After implementing an early warning system that focused on ninth graders, CPS experienced an increase in the number of freshmen students that they deemed on-track "from a baseline of 56 to 59 percent in 2004-2007 to 69 percent in 2010" (Bruce et al., 2011, p. 31). From 2007–2013, CPS attributed the on-track promotion rates of an additional 6,900 ninth graders to the use of its on-track indicator (Roderick et al., 2014), which had an 85% success rate with predicting ninth graders who would not graduate from high school (Jerald, 2006).

It is important to note that a number of research reports have suggested that implementing an early warning system in isolation from other possible interventions does not eliminate the problem of ninth grade retention. Balfanz (2009) recommended that district leaders implement several additional strategies to support the effectiveness of the early-warning system:

- Develop a comprehensive intervention strategy to address identified student challenges;
- Understand and build on the strengths of each student;
- Provide teachers with professional development on using early warning systems;

- Leverage additional resources to address identified needs; and
- Monitor and evaluate the impact of interventions on students.

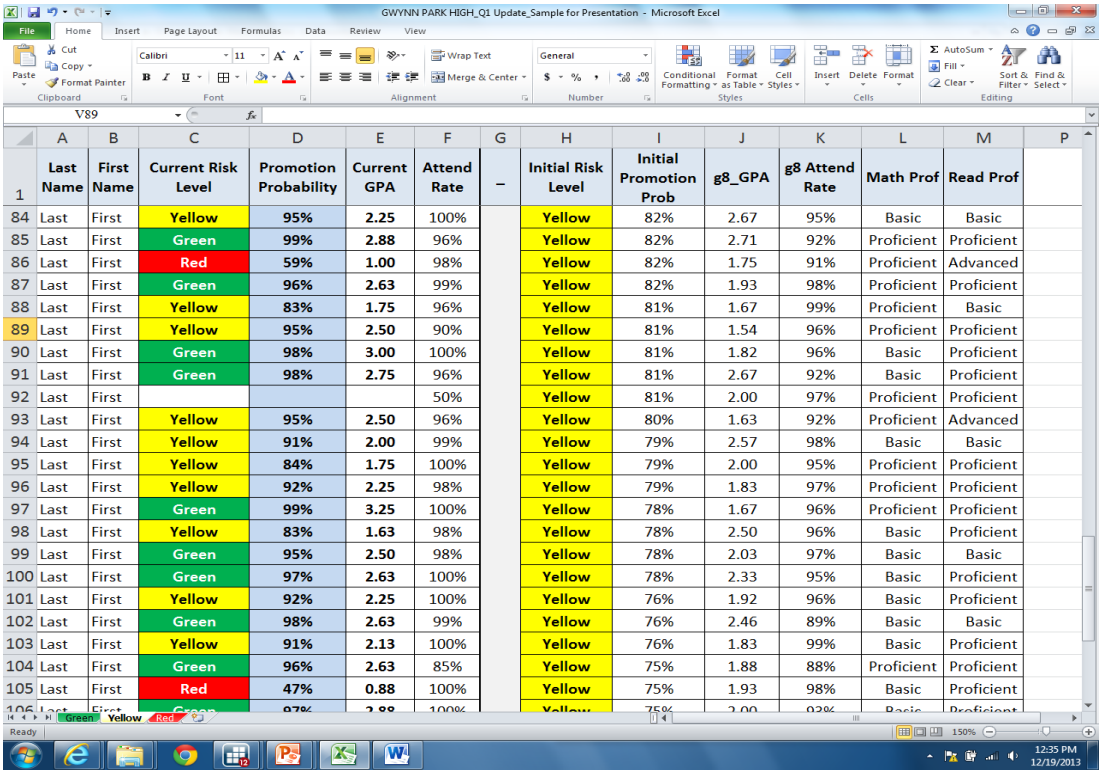
***Philadelphia.*** In the School District of Philadelphia, three schools piloted an early warning system as part of an overall school intervention that included "a second shift of adults" at the school (Jerald, 2006, p. 37). Over the first few years of the system's implementation, the 2009-2010 data for the schools showed that "56 percent fewer of the students were off-track in attendance, 53 percent fewer were off track in behavior, 82 percent fewer were off track in math, and 78 percent fewer were off track in literacy" (Jerald, 2006, p. 37). By implementing a comprehensive approach, which included the use of early warning systems to identify students at risk of retention, local schools moved students in a more positive direction towards graduation.

***The National High School Center.*** In 2010, the National High School Center developed one of the first early warning systems—the National High School Center's Early Warning System High School Tool (Therriault, O'Cummings, Heppen, Yerhot, & Scala, 2013). This tool was available free-of-charge to help schools and districts identify high school students who were likely to drop out. The organization identified a seven-step process for implementing an early warning system. These steps include establishing roles and responsibilities, using the early warning system tool, reviewing data, interpreting data, providing interventions, monitoring students and interventions, and evaluating the implementation (Therriault et al., 2013). This process will serve as the framework for understanding the implementation of the Early Warning Indicator Report in Wyatt School District.

**Wyatt School District early warning system.** To identify students who might be at risk of failing to complete the ninth grade, educational leaders in Wyatt School District implemented a system-wide early warning system in 2009. The district based its initial system on the model used in Chicago Public Schools and in the School District of Philadelphia (Adams & Taylor, 2011). In the early phases of the process, staff entered the data collected for the warning system into a static Excel spreadsheet, which posed a number of challenges, including the use of incorrect data, untimely reports, and a lack of communication with school administrators ("Wyatt School District Research Report 3," 2011). To address these issues, the district eventually updated and relaunched the system in 2013 as the Early Warning Indicator Report (EWIR; "Wyatt School District Research Report 4," 2014).

The EWIR, developed as part of a university partnership, analyzed five factors with a high probability of predicting student outcomes in seventh, eighth, and ninth grades ("Wyatt School District Research Report 4," 2014). The factors evaluated in the system included (a) state assessment scores for reading, (b) state assessment scores for math, (c) attendance rates, (d) disciplinary infractions, and (e) GPA ("Wyatt School District 3," 2014). The system entered these values into an algorithm for evaluation and placed ninth grade students into three categories: (a) low risk of retention [green], (b) moderate risk of retention [yellow], and (c) high risk of retention [red] ("Wyatt School District 3," 2014). Students in the green category had "a 95% chance of passing ninth grade," students in the yellow category had "a 70%-95% chance of passing ninth grade," and students in red had "less than a 70% chance of passing 9th grade" ("Wyatt School District Research Report 4," 2014, p. 5).

The EWIR calculated data using a logistic regression analysis of the key data points referenced above using ninth grade promotion as the dependent variable and eighth grade performance as the independent variable ("Wyatt School District Research Report 4," 2014). The analysis identified eighth grade course grades as the best predictor, while attendance, standardized test scores, and disciplinary infractions remained statistically significant ("Wyatt School District Research Report 4," 2014). Staff updated the EWIR every quarter with new grade and attendance data ("Wyatt School District 3," 2014). Figure 2 provides an example of a quarterly report received by district principals. The promotion probability refers to the likelihood that students will pass the ninth grade on their first attempt ("Wyatt School District Research Report 4," 2014).



GWYNN PARK HIGH_Q1 Update_Sample for Presentation - Microsoft Excel

| | A | B | C | D | E | F | G | H | I | J | K | L | M | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Last Name | First Name | Current Risk Level | Promotion Probability | Current GPA | Attend Rate | – | Initial Risk Level | Initial Promotion Prob | g8_GPA | g8 Attend Rate | Math Prof | Read Prof | |
| 84 | Last | First | Yellow | 95% | 2.25 | 100% | | Yellow | 82% | 2.67 | 95% | Basic | Basic | |
| 85 | Last | First | Green | 99% | 2.88 | 96% | | Yellow | 82% | 2.71 | 92% | Proficient | Proficient | |
| 86 | Last | First | Red | 59% | 1.00 | 98% | | Yellow | 82% | 1.75 | 91% | Proficient | Advanced | |
| 87 | Last | First | Green | 96% | 2.63 | 99% | | Yellow | 82% | 1.93 | 98% | Proficient | Proficient | |
| 88 | Last | First | Yellow | 83% | 1.75 | 96% | | Yellow | 81% | 1.67 | 99% | Proficient | Basic | |
| 89 | Last | First | Yellow | 95% | 2.50 | 90% | | Yellow | 81% | 1.54 | 96% | Proficient | Proficient | |
| 90 | Last | First | Green | 98% | 3.00 | 100% | | Yellow | 81% | 1.82 | 96% | Basic | Proficient | |
| 91 | Last | First | Green | 98% | 2.75 | 96% | | Yellow | 81% | 2.67 | 92% | Basic | Proficient | |
| 92 | Last | First | | | | 50% | | Yellow | 81% | 2.00 | 97% | Proficient | Proficient | |
| 93 | Last | First | Yellow | 95% | 2.50 | 96% | | Yellow | 80% | 1.63 | 92% | Proficient | Advanced | |
| 94 | Last | First | Yellow | 91% | 2.00 | 99% | | Yellow | 79% | 2.57 | 98% | Basic | Basic | |
| 95 | Last | First | Yellow | 84% | 1.75 | 100% | | Yellow | 79% | 2.00 | 95% | Proficient | Proficient | |
| 96 | Last | First | Yellow | 92% | 2.25 | 98% | | Yellow | 79% | 1.83 | 97% | Proficient | Proficient | |
| 97 | Last | First | Green | 99% | 3.25 | 100% | | Yellow | 78% | 1.67 | 96% | Proficient | Proficient | |
| 98 | Last | First | Yellow | 83% | 1.63 | 98% | | Yellow | 78% | 2.50 | 96% | Basic | Proficient | |
| 99 | Last | First | Green | 95% | 2.50 | 98% | | Yellow | 78% | 2.03 | 97% | Basic | Basic | |
| 100 | Last | First | Green | 97% | 2.63 | 100% | | Yellow | 78% | 2.33 | 95% | Basic | Proficient | |
| 101 | Last | First | Yellow | 92% | 2.25 | 100% | | Yellow | 76% | 1.92 | 96% | Basic | Proficient | |
| 102 | Last | First | Green | 98% | 2.63 | 99% | | Yellow | 76% | 2.46 | 89% | Basic | Basic | |
| 103 | Last | First | Yellow | 91% | 2.13 | 100% | | Yellow | 76% | 1.83 | 99% | Basic | Proficient | |
| 104 | Last | First | Green | 96% | 2.63 | 85% | | Yellow | 75% | 1.88 | 88% | Proficient | Proficient | |
| 105 | Last | First | Red | 47% | 0.88 | 100% | | Yellow | 75% | 1.93 | 98% | Basic | Proficient | |

*Figure 2*. Wyatt School District's Early Warning Indicator System sample report. Adapted from *The Early Warning Indicator System presentation*. Wyatt School District 3. (2014).

The EWIR helps school staff identify students who are at risk of not passing classes early in the school year and provide the necessary academic and social interventions that will help students stay or get on-track for ninth grade promotion and, ultimately, high school graduation (T. Richardson (pseudonym), April 24, 2014). The report pictured in Figure 2 is also available for seventh and eighth grade students to help middle school leadership identify students with lower expected ninth grade promotion probability and intervene earlier in the students' lives ("Wyatt School District Research Report 4," 2014).

To evaluate the EWIR's implementation, central office personnel asked Wyatt School District principals in 2013 about approaches they were using, based on information they received in their EWIR, to intervene in the lives of students identified as being at risk of retention or dropping out of school altogether. Table 3 details the administrators' responses regarding existing strategies, and Table 4 highlights the administrators' responses regarding potential next steps.

For SY 2015, the district updated the EWIR to improve the information that it provided ("Wyatt School District Research Report 4," 2014) and to eliminate the previously used state assessment scores ("Wyatt School District Research Report 4," 2014). The new assessment data included information that aligned with the new College and Career Readiness Standards (Common Core) and the new Partnership for Assessment of Readiness for College and Careers (PARCC) tests in the state. At the time of the present study, the EWIR also included data from the Scholastic Reading Inventory (SRI) tests and Scholastic Math Inventory (SMI) tests ("Wyatt School District Research Report 4," 2014). The update also ensured that the system would include ninth grade students

left off of the EWIR analysis due to missing data and assign to them a promotion probability based on a separate algorithm ("Wyatt School District Research Report 4," 2014).

Table 3

*WSD Strategies Based on Early Warning Indicator Report – Existing Strategies, 2013.*

| Existing strategies |
| --- |
| • Chat and Chew sessions with principal |
| • Celebration of students moving from red to yellow/green |
| • Regular pull-outs regarding study skills (Guidance Dept.) |
| • Review and discuss early warning data with staff |
| • Created ninth grade hall to assist teachers with building relationships with students |
| • Parent/teacher conference with all at-risk students |
| • Counselors met with students who failed English 9 |
| • Ninth Grade interdisciplinary meetings to discuss students' progress and assigned interventions |
| • Ninth Grade Parent Night to discuss data and services available to students |
| • Double period math |
| • Data utilizations around strategies that work |
| • Mentors assigned to at-risk students |
| • Small group pull outs during class time |
| • Behavior contracts with parent participation |
| • Test taking strategies workshop (parent/students) |

- Quarterly parent meetings (ninth grade)
- Before, during, and after school tutoring
- Ninth grade data review during grade level assembly
- Compass Learning (online credit recovery)
- Freshman Scholars (Top 25 students)
- Mandatory parent meeting for all students failing at least one graduation course
- Wrap-around services provided
- One-on-one counseling
- Small focus groups (Advisory)
- Peer mentoring
- Pupil Personnel Worker (PPW) addressing attendance problems
- Teacher developed individualized action plans
- Increased focus on at-risk in collaborative planning sessions
- Cornell Notes – class note-taking method
- Letters to parents informing at-risk status
- Assigned mentor check attendance weekly
- Monthly ninth grade assemblies with motivational speaker
- Bi-weekly data dive meetings (Focus-Red Group)

*Note.* Adapted from Strategies-Early Warning Indicator Report. Wyatt School District. "Wyatt School District 4" (2014).

Table 4

*WSD Strategies Based on Early Warning Indicator Report – Potential Next Steps, 2013*

| Potential next steps |
| --- |
| • Extended learning opportunities |
| • Parent contacted when student slips below 70% |
| • Collaborate with parent for home/school interventions |
| • Create temporary grouping of students based on risk level to provide small group instruction |
| • After school credit recovery |
| • Increase options for support and credit recovery |
| • Walk-in counseling for substance abuse |
| • Add English 9 Course - Compass Learning |
| • Additional resource for chronic truancy |
| • Provide skill building sessions for students who fail English |
| • High School Parent Workshop<br>o Grading<br>o Study skills<br>o Time management<br>o Parental expectations |

*Note.* Adapted from Strategies-Early Warning Indicator Report. Wyatt School District. "Wyatt School District 4" (2014).

**Summary**

The existing literature provides a number of recommendations for increasing ninth grade promotion rates (Balfanz, 2009; Bridgeland et al., 2006; Bruce et al., 2011; Henry et al., 2012; Herlihy, 2007; Somers et al., 2009; "Wyatt School District Research Report 1," 2014). While the current body of research has provided a significant amount

of useful information on ninth grade retention, researchers have yet to explore how schools in large urban districts in the Mid-Atlantic region are using early warning systems to increase ninth grade promotion rates. To fill this void, this researcher analyzed the implementation of the EWIR in four Wyatt School District high schools – two schools with an increase in ninth grade promotion rates and two schools with a decrease in ninth grade promotion rates—from SY 2013 to SY 2014—to identify evidence-based best practices for the district. The study examined how the district implemented the EWIR in these schools and explored how they used the tool to improve ninth grade promotion rates. The inquiry also provides a comparison of how the four schools used the EWIR to meet the unique needs of their students.

Although the implementation of the EWIR in Wyatt School District was still in its early stages at the time of this study, the identification of key strategies and best practices can have a positive impact on the implementation process. Hall and Jennings (2008) suggested,

> During implementation, few strategies will be well understood. The time frame for political decision making often precludes the gathering of complete, or even rudimentary, evidence. Over time, as implementation continues or expands and as researchers and evaluators have opportunities to study programs and strategies with greater depth and rigor, the quality of evidence will improve, providing information regarding the direction and strength of expected impacts, along with any environmental mediators that affect outcomes of interest. (p. 704)

Over time, the inclusion of these practices, across high schools, ideally will lead to improvements in the overall ninth grade promotion rate in Wyatt School District.

## Section 2: Investigation

The purpose of this study was to examine how high schools in the Wyatt School District used an Early Warning Indicator Report (EWIR) to improve ninth grade promotion rates. Preliminary data indicates that the EWIR has played a key role in improved rates at several schools in the district. Understanding how these schools have used the EWIR to achieve these increases will aid educational leaders in their efforts to replicate proven successes at other schools across the district. The analysis of the EWIR conducted during the present study included a seven-step process designed to determine how four schools implemented the early warning system. The theoretical framework for this study is the Early Warning Intervention Monitoring System (EWIMS) by Therriault et al. (2013). The purpose of the framework is to support schools and districts with implementing early warning systems that monitor high school students at risk of not graduating. Data collected and analyzed based on the theoretical framework served as the structure for evaluating the implementation in Wyatt School District. Figure 3 illustrates the framework.

Developed by the National High School Center at the American Institutes for Research (AIR), the implementation process depicted in Figure 3 draws upon research on the use of data to improve schools and "data-driven decision making" (Therriault, O'Cummings, Heppen, Yerhot, & Scala, 2013, p. 1). AIR supports the implementation of early warning systems in many states and districts across the United States, including initiatives developed by the Michigan Department of Education and Chicago Public Schools-Career and Technical Education (AIR, 2015). They have supported the development of the Massachusetts Early Warning Indicator System, the California Early

Warning and Intervention System, the Virginia Early Warning System, and other AIR Regional Education Laboratories across the country (AIR, 2015). The framework outlined by Therriault et al. identifies specific outcomes schools should target for each step of the implementation process. Table 5 captures these outcomes.

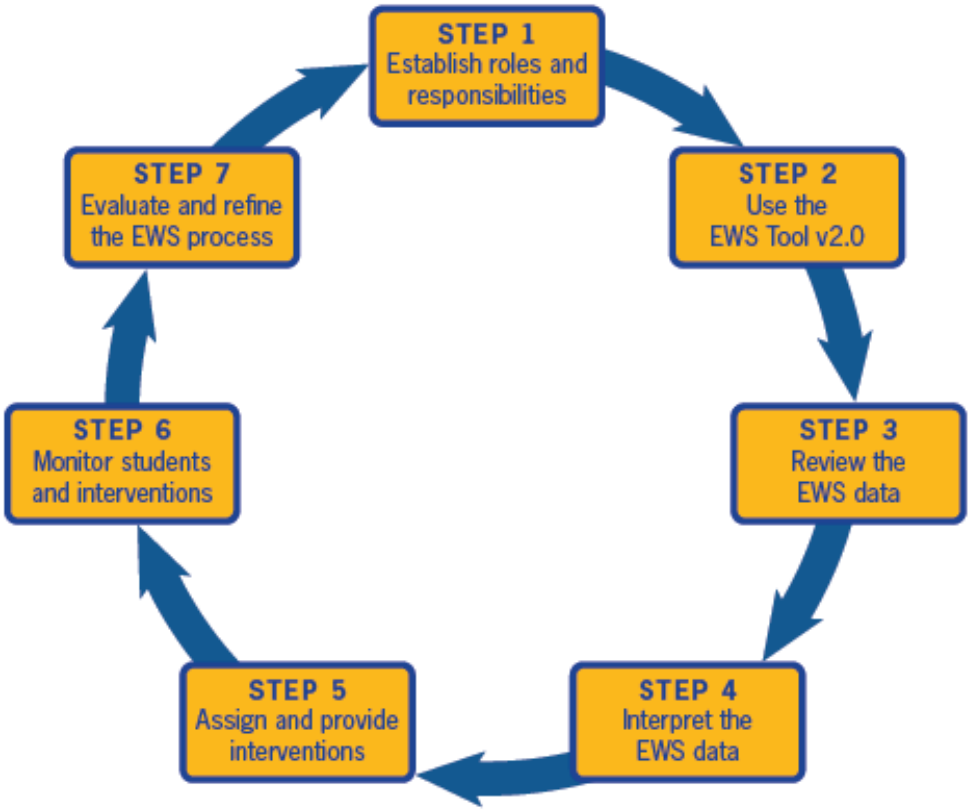



*Figure 3*. Early warning intervention monitoring system implementation process. Adapted from *High School Early Warning Intervention Monitoring System Implementation Guide.* Therriault et al. (2013).

Table 5

*Early Warning Intervention Monitoring System (EWIMS) Theoretical Framework with Anticipated Outcomes*

| Process step | Anticipated outcomes |
|---|---|
| Step 1: Establish roles and responsibilities | 1. Establishment of an early warning intervention monitoring system (EWIMS) team composed of staff who have a diverse knowledge of students in the school, who understand their roles, and who are trained in the use of the tool and the EWIMS process<br>2. Establishment of meeting routines and common agendas<br>3. Identification of one or more individuals responsible for routinely importing or entering data into the tool |
| Step 2: Use the Early Warning System (EWS) High School Tool | 1. Understanding of the basic features of the EWS High School Tool and EWS reports by all team members<br>2. Designated district or school technology specialist or specialists responsible for loading the tool with student data in a regular and timely manner<br>3. Fully-populated tool with up-to-date information based on regularly scheduled data import or entry |
| Step 3: Review the EWS data | 1. Identification of individual students who show signs of risk for dropping out of high school<br>2. Understanding of patterns across groups of students and over time that allow the EWIMS team to begin to consider the allocation of student support or dropout-prevention resources to flagged students<br>3. *In preparation for Step 4*: Identification of the type of additional information that will be needed to better understand possible underlying reasons specific students were flagged for particular indicators<br>4. *In preparation for Step 4*: Assignment of responsibilities for gathering the additional information and data on specific students and student characteristics |
| Step 4: Interpret the EWS data | 1. Better understanding of reasons that individual students, and groups of students, are flagged as being at risk<br>2. Identification of individual and common needs among groups of students |

| | |
|---|---|
| Step 5: Assign and provide interventions | 1. Compiled inventory of supports and interventions available to students in the school<br>2. Assignment of flagged students to supports and interventions on the basis of student needs identified in Steps 3 and 4 (documented for each individual student in the EWS High School Tool)<br>3. Identification of gaps in the available supports and interventions<br>4. Recommendations for schoolwide support strategies aimed at addressing the most common student needs identified in Steps 3 and 4 |
| Step 6: Monitor students interventions | 1. Knowledge about individual student progress and specific responses to assigned interventions, which allows the EWIMS team to make decisions about continuing, reassigning, or terminating interventions for flagged students<br>2. Identification of gaps in the available supports and interventions for students, recommendations for new intervention strategies, and prioritization of new interventions that are based on EWS data<br>3. Knowledge about the general effectiveness of interventions, based on data from monitoring students participating in each program<br>4. Information sharing with appropriate stakeholders about student needs, the impact of existing interventions, and the need for additional interventions, if applicable |
| Step 7: Evaluate and refine the EWS process | 1. Shared understanding of the EWIMS process implementation strengths and challenges<br>2. Clear recommendations for improving the EWIMS process<br>3. Established EWIMS team for the following school year, composed of members with a clear understanding of the process and of their roles<br>4. Validated indicators that substantiate the EWS data in the school and district |

*Note.* Adapted from Adapted from *High School Early Warning Intervention Monitoring System Implementation Guide.* Therriault et al. (2013).

**Research Questions**

The following research questions served as a foundational guide for the development and implementation of this study:

1. How are school personnel across four schools in this case study from Wyatt School District (two with increases in ninth grade promotion rates and two with decreases in ninth grade promotion rates) using the Early Warning Indicator Report to improve ninth grade promotion rates?
2. What are the similarities in use of the Early Warning Indicator Report implementation at the two schools experiencing an increase in ninth grade promotion rates?
3. What are the similarities in use of the Early Warning Indicator Report implementation at the two schools experiencing a decrease in ninth grade promotion rates?
4. How are the personnel in schools that have seen increases in ninth grade promotion rates using the Early Warning Indicator Report differently than are those in the schools experiencing decreases in promotion rates?

**Qualitative Methods**

During this examination of Wyatt School District's implementation of the EWIR, the researcher utilized a qualitative methods approach to gather and analyze data. To understand the EWIR implementation process and school personnel's use of the report, the researcher obtained data from interviews conducted with high school administrators, professional school counselors, teachers, and other school personnel who interacted with the system. Interviews with district central office personnel, including principal supervisors, also helped to clarify established expectations and systems of oversight at the district-level. During the interviews, the researcher sought to determine whether school staff believed that the use of EWIR contributed to increases in their school's ninth

grade promotion rate. Specifically, the researcher sought to collect information related to the following areas:

- roles and responsibilities of school EWIR teams,
- use of the EWIR within each school,
- similarities and differences in the process of determining what to do with EWIR data,
- similarities and differences in the EWIR data review process, and
- respondents' understanding of the oversight and accountability process for the EWIR.

A qualitative case study design was appropriate for this inquiry because it helped the researcher to understand individual experiences with and uses of the EWIR in schools. As Maxwell (2005) explained, qualitative research allows for the understanding of processes, as opposed to outcomes, and focuses on people and situations. Gay, Mills, and Airasian (2006) also noted that "qualitative research seeks to probe deeply in the research setting to obtain in-depth understandings about the way things are, why they are that way, and how the participants in the context perceive them" (p. 14). A qualitative approach allowed the researcher to ask probing questions during the interview to understand (a) the perceived connection between the EWIR and ninth grade promotions rates and (b) the report's benefit to students, teachers, and administrators. Creswell (1997) identified eight reasons for conducting a qualitative study:

1. Select a qualitative study because of the nature of the research question. In a qualitative study, the research question often starts with *how* or *what* so that initial forays into the topic describe what is going on.

2. Choose a qualitative study because the topic needs to be *explored*.
3. Use a qualitative study because of the need to present a detailed view of the topic
4. Choose a qualitative approach in order to study individuals in their *natural setting.*
5. Select a qualitative approach because of interest in *writing* in a literary style; the writer brings himself or herself into the study, the personal pronoun "I" is used, or perhaps the writer engages a storytelling form of narration.
6. Employ a qualitative study because of *sufficient time and resources* to spend on extensive data collection in the field and detailed data analysis of "text" information.
7. Select a qualitative approach because *audiences are receptive* to qualitative research.
8. Employ a qualitative approach to emphasize the researcher's role as an *active learner* who can tell the story from a participants' view rather than an "expert" who passes judgment on participants. (Creswell, 1997, p. 17) The researcher selected a qualitative approach for the present study because of the need to explore how each school used the EWIR. School leaders have the autonomy to utilize the report in whichever way works best for their individual schools. A qualitative study that allowed for the collection of personal accounts through one-on-one interviews helped the researcher to obtain a detailed picture of how staff at each of the schools employed the EWIR to effect change in ninth grade promotion rates. This approach also

helped the researcher to understand how the different approaches impacted the level of success that each school experienced in improving these rates.

**Design**

The researcher utilized a qualitative case study method to examine the implementation of the EWIR system in Wyatt School District. Merriam (2009) defined a case study as "an in-depth description and analysis of a bounded system" (p. 40). For this inquiry, each school served as a case, and each case was bounded by the school personnel's use of the EWIR to improve promotion rates for ninth grade students. Creswell (2007) provided the following description of case study research:

> [A] qualitative approach in which the investigator explores a bounded system (a *case*) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving *multiple sources of information* (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case *description* and case-based themes. (p. 73, emphasis in original)

According to Yin (2008), a case study is advantageous when answering how and why questions. The case study format allowed the researcher to analyze various qualitative sources of information—including interviews, documents, and field notes—to provide an in-depth description of *how* and *why* schools used the EWIR to improve ninth grade promotion rates. As Merriam (2009) noted, the case study method provides "insight, discovery, and interpretation rather than hypothesis testing" (p. 42). The researcher approached the interviews and discovery with no conclusions or hypotheses to test. Instead, the interviews provided an opportunity for the researcher to probe further to

discover *what* was happening within the case, and *how* and *why* the phenomenon of study occurred.

The present study involved a multisite study of four schools, and included a cross-case analysis of the case studies designed to identify similarities, differences, and generalizations that could inform the future practice of school leaders who seek to use the EWIR to improve ninth grade promotion rates. Kahn and VanWynsberghe (2008) explained, "Cross-case analysis is a research method that facilitates the comparison of commonalities and difference in the events, activities, and processes that are the units of analyses in case studies" (p. 1). The researchers go on to note that "the fundamental power of cross-case analysis emerges from understanding how expertise can be built and shared" (Kahn & VanWynsberghe, 2008, p. 16). Using a cross-case analysis helped this researcher to identify best practices during EWIR implementation at schools in the Wyatt School District that were experiencing an increase in ninth grade promotion rates. The researcher also sought to pinpoint any differences in implementation between schools that saw increases in promotion rates and those that experienced decreases. The use of a cross-case analysis served to "strengthen the precision, the validity, and the stability of the findings" (Miles & Huberman, 1994, p. 29). Utilizing this method also enhances the credibility of the recommendations for district-wide use of the EWIR to improve ninth grade promotion rates.

**Potential limitations of this study.** It is important to take a moment to acknowledge the limitations of this study. First, this inquiry does not evaluate whether Wyatt School District used the appropriate factors to determine the students' likelihood of being promoted from ninth to tenth grade. For example, to date, Wyatt School District

has not included social or health factors in its consideration of student performance. A second limitation involves the researcher's inability to measure how much of an impact the EWIR really had on improving ninth grade promotions rates. Additionally, the district did not utilize a system-wide comprehensive tracking mechanism that collected data on the interventions in use prior to the EWIR implementation. This presents a limitation because there is no documented baseline data regarding interventions assigned to students who may have been at risk of retention to identify what, if any, differences may have occurred once the school implemented the EWIR system. Lastly, the study did not account for interventions ninth grade students might have been receiving inside or outside of school that may have contributed to an improved student promotion rate.

Despite these limitations, the study provides data on evidence-based best practices for implementing the EWIR that are specific to the student population in Wyatt School District. Hall and Jennings (2008) identified the benefits of best practices as "(1) successful initiatives addressing important issues, (2) learning what works and does not work in different contexts, and (3) inspirational guidelines for decision making" (p. 704). By understanding how to utilize the EWIR tool more effectively with ninth grade students, high schools in Wyatt School District will have the opportunity to continue to improve ninth grade promotion rates.

**Methods and Procedures**

This inquiry explored the experiences of staff in Wyatt School District who had personal experience using the EWIR in their work with ninth grade students. The sections that follow detail the process involved in collecting data for this study.

**The target district.** In SY 2014, Wyatt School District was one of the nation's 20 largest school districts, with 207 schools, approximately 125,000 students, and nearly 23,000 employees. The district served a student population from urban, suburban, and rural communities. Of the students enrolled in district, 63% were economically disadvantaged, 95.5% were from minority populations, and 15% were English language learners ("Wyatt School District 5," 2014).

The researcher selected the four target high schools for this study based on their ninth grade promotion rates in SY 2014. The sites included Adams High School, Boyd High School, Cooper High School, and Donaldson High School (all pseudonyms). More than 40% of the students at each of the four schools took part in the free or reduced meals program. For SY 2014, district leaders gave each high school in the system a target of increasing ninth grade promotion rates by 5% over SY 2013 numbers (W. Moore (pseudonym), personal communication, March 10, 2015). While the ninth grade promotion rates at Adams and Boyd increased by greater than 5% during the year, the ninth grade promotion rates at Cooper and Donaldson decreased.

The populations ranged across the four schools. Adams had more than 1,000 students who identified as Black/African American (94%), Hispanic/Latin (4%), or other (2%). Boyd had more than 2,000 students who identified as Black/African American (93%), Hispanic/Latino (3%), Asian (2%), or other (2%). Cooper had less than 900 students who identified as Black/African American (91%), Hispanic/Latino (7%), or other (2%). Donaldson had more than 2,300 students who identified as Black/African American (59%), White (14%), Hispanic/Latino (14%), Asian (10%), or other (3%) (MASDE, 2013).

**Participants.** The participant selection process was purposive. Specifically, the researcher used the growth in ninth grade promotion rates from SY 2013 to SY 2014 to identify four high school sites for this study. The researcher chose two schools that demonstrated an increase in ninth grade promotion rates and two schools with a decrease in rates. The inquiry focused on collecting data from school personnel who took part in the EWIR implementation within their building. This population included principals, other school administrators, professional school counselors, and teachers. See Appendix G for the complete list of participants.

**Validity.** Validity is important because it provides a way to establish truth in research (Golafshani, 2003). To ensure the validity of the findings, the researcher triangulated the data collected by interviewing multiple staff persons within each school and at the district's central office. "Triangulation is the process of using multiple methods, data collection strategies, and data sources to obtain a more complete picture of what is being studied and to cross-check information" (Gay et al., 2006, p. 405). The researcher also sought to triangulate the data by using multiple sources, including interviews, school and district documents, field notes, and district ninth grade data. Gay et al. (2006) suggested the following additional strategies that aid in establishing the validity of qualitative research:

- debriefing with peers,
- collecting and reviewing other data items,
- conducting member checks,
- triangulating data amongst school personnel,
- ensuring structural corroboration or coherence, and

- establishing an audit trail.

In addition to triangulation, the researcher also sought to increase the validity of the findings by creating an audit trail.

**Instruments.** Merriam (1998) explained that in qualitative studies, "the researcher is the primary instrument for data collection and analysis" (p. 6). As the primary investigator, the researcher conducted all interviews to gain a first-hand account of how the participants used the EWIR tool. Semi-structured interviews were the primary instrument for data collection because they incorporate questions that are predetermined and specific (structured) and allow for follow-up and probing questions based on responses (unstructured) that help the researcher gain a more in depth understanding of the topic of study. By combining these two types of questions into a semi-structured interview format, the researcher attained "a combination of objectivity and depth" and was able to compile and explain the results more easily (Gay et al., 2006, p. 174). According to Merriam (1998), in semi-structured interviews "either all of the questions are more flexibly worded, or the interview is a mix of more and less structured questions" (p. 74). There is flexibility for the researcher to respond to answers and ask probing questions based on the participants' remarks (Merriam, 2009).

The researcher also collected relevant data through an analysis of the EWIR, ninth grade data, a review of district and school documents, and field notes. The EWIR aided school representatives in identifying students who might have been at risk for not completing the ninth grade. The ninth grade data analyzed for this research study included student grades, courses enrolled, and attendance patterns. Evidence collected from ninth grade data are embedded within responses from interviewees in Section 3. A

review of district and school documents included the Early Warning Indicator Action Plan for each school, ninth grade focus group data, and the EWIR quarterly update for each school. According to Gay et al. (2006),

> Field notes describe, as accurately as possible and as comprehensively as possible, all relevant aspects of the situation observed. They contain two basic types of information: (1) descriptive information that directly records what the observer has specifically seen or heard on-site through the course of the study and (2) reflective information that captures the researcher's personal reactions to observations, the researcher's experiences, and the researcher's thoughts during an observation session. (p. 414)

Evidence collected from field notes are embedded within responses from interviewees in Section 3.

***Interviews*.** Semi-structured interviews allowed the researcher to ask probing follow-up questions based on previous interviews and information obtained during the literature review. Merriam (1998) explained that interviews are one of many methods designed to collect data in qualitative research (1998). "Interviewing is necessary when we cannot observe behavior, feelings, or how people interpret the world around them. It is also necessary to interview when we are interested in past events that are impossible to replicate" (Merriam, 2009, p. 88). Merriam also noted, "Interviewing is also the best technique to use when conducting intensive case studies of a few selected individuals" (p. 88). In this study, the researcher identified a selection of schools and staff that could provide insight into the use of the EWIR. Interviews proved an ideal way to obtain their thoughts and perspectives on the system's implementation.

The researcher conducted all participant interviews at the target schools at a time and location that the researcher determined in partnership with the respondent via email and telephone calls. As Creswell (1998) noted, qualitative research should take place in "a natural setting" (1998, p. 15).

All participants signed an informed consent form before proceeding with the interview. All interviews were recorded digitally using the Voice Memo iPhone application. Interviews were transcribed using Verbal Ink, an online transcription service. During the interviews, the researcher adhered to the following procedures:

1. Read prepared interview statement to establish rapport and provide background information study.
2. Review informed consent form notifying participants of confidentiality, obtain participant signature, and receive consent to move forward with interview.
3. Proceed with interview protocol and conduct interview.

The researcher developed the interview protocol using the anticipated outcomes from Therriault's et al. (2013) theoretical framework detailed in Table 5. Appendix D provides a comprehensive mapping of interview questions and anticipated outcomes.

***Document analysis.*** While semi-structured interviews served as the primary source of data for this inquiry, district and school documents also provided additional insight into how schools used the EWIR to improve ninth grade promotion rates. Over the course of the study, the researcher reviewed the following documents:

1. *Early Warning Indicator Action Plan (Ninth Grade).* This document provided details on the district-level action plan each school submitted to the central office that described how they utilized the EWIR and the specific

interventions that they employed to support students identified as at risk (see Appendix E).

2. *Ninth grade focus group data*. This data provided insight into the support students received in response to EWIR data and the students' perceptions about the helpfulness of selected interventions. Wyatt School District requested that this document not be included in the appendices.
3. *EWIR-Quarterly Update*. These reports from each school provided student-level data, identified students' risk level, and noted any change in students' risk level, if applicable (see Appendix F).

**Confidentiality**

During the data analysis process, the researcher assigned an alias to all participants to keep their identities confidential. Additionally, to protect participants' confidentiality, the researcher did not record any names during the interviews and ensured that neither the coded data nor the published research would include any information that would allow the reader to identify study participants.

**Data Analysis**

Following each set of interviews at a school, the researcher had all interview data transcribed using an online transcription service, VerbalInk, before proceeding to the next school. While reviewing each data set, the researcher recorded observations and reflections. The resulting notations informed data collection during the next set of interviews. The researcher organized and categorized all data from interviews, field notes, and records into a case study database using Nvivo, a qualitative research software package. The case study database served to organize the data and helped the researcher to

locate specific information during the data analysis process (Merriam, 2009, p. 203). Merriam (2003) outlined the steps for analyzing qualitative data:

1. Category construction
    a. Open coding: Review transcripts and notate comments, observations, and queries based on what may be useful.
    b. Axial coding (or analytical coding): Group similar notations and comments.
    c. Category creation: Identify patterns and themes to sort data that are abstractions taken from the data.
2. Sorting categories and data
    a. Refine and revise categories and create subcategories to develop a preliminary list of categories.
    b. Create file folders, electronically or by hand, and place each set of data (with identifying codes from transcript) within the appropriate folder.
    c. Continually check if categories "hold up" based on further data analysis.
3. Naming categories
    a. Name categories based on information from the researcher, the study participants, and/or the literature.
4. Verifying that categories meet the criteria below (p. 186, emphasis in original)
    a. Be *responsive* to (answer) the research question(s).
    b. Be as *sensitive* to the data as possible.
    c. Be *exhaustive* (include enough categories to encompass all relevant data).

d. Be *mutually exclusive* (a relevant unit of data can be placed in only one category).
e. Be *conceptually congruent* (all categories are at the same conceptual level).

5. Identifying theories
    a. Make connections across data elements and categories to "make inferences, develop models, or generate theory" (p.188).
    b. Link categories together to explain meaning of data.

The researcher identified relevant themes for each school, and then compared the themes across all cases to determine similarities and differences in EWIR implementation that may have affected the ninth grade promotion rates at the schools. Merriam (2009) suggested that the additional analysis is beneficial when identifying categories and themes in qualitative, case study analysis:

> The level of analysis can result in a unified description across cases; it can lead to categories, themes, or typologies that conceptualize the data from all the cases; or it can result in building substantive theory offering an integrated framework covering multiple cases. (p. 204)

This cross-case analysis of Wyatt School District's implementation of the EWIR at four high schools provided an opportunity to identify themes and processes that might positively impact ninth grade promotion rates. Conversely, there was the possibility that the research would not identify common themes amongst the schools with an increase in ninth grade promotion rates or schools with a decrease in ninth grade promotion rates. The research also identified differences between Adams High School and Boyd High

School (the two schools that experienced increases in promotion rates), and Cooper High School and Donaldson High School, (the schools that experienced decreases in promotion rates). Section 3 presents a more detailed discussion of the cross-case analysis.

## Section 3: Results

The researcher conducted a cross-case analysis to address the established research questions and identify best practices for the EWIR in Wyatt School District. Using the Voice Memo iPhone app, the researcher recorded all interviews and then had them transcribed using VerbalInk, an online transcription service. The researcher shared all transcriptions with interview participants to ensure that the information was captured correctly. Nvivo, a qualitative data analysis software package, was used to analyze and categorize the data.

The purpose of this study was to examine how four high schools used the Early Warning Indicator Report (EWIR) to aid in the improvement of ninth grade promotion rates. The following research questions informed this study:

1. How are school personnel across four schools in Wyatt School District (two with increases in ninth grade promotion rates and two with decreases in ninth grade promotion rates) using the Early Warning Indicator Report to improve ninth grade promotion rates?
2. What are the similarities in the ways that the two schools experiencing an increase in ninth grade promotion rates implemented the Early Warning Indicator Report?
3. What are the similarities in the ways that the two schools experiencing a decrease in ninth grade promotion rates implemented the Early Warning Indicator Report?

4. How are the personnel at schools that have seen increases in ninth grade promotion rates using the Early Warning Indicator Report differently than are the personnel at the schools experiencing decreases in promotion rates?

During interviews, study participants described how their schools used the EWIR to identify students who were at risk of not being promoted to the tenth grade on time. They also discussed specific student interventions that the school personnel developed in response to the report to improve student success. The results discussed in this chapter came from five data sources: semi-structured interviews with school staff, semi-structured interviews with central office staff, school documents, district documents, and field notes.

The participants in this study included 16 school-based and district-level staff from an urban school district in the Mid-Atlantic region. All participants had some level of familiarity with the EWIR. School-based personnel represented four high schools within the district: Adams High School, Boyd High School, Cooper High School, and Donaldson High School. Adams and Boyd had increases in ninth grade promotion rates from the previous year, and Cooper and Donaldson had decreases in ninth grade promotion rates. The researcher asked the principals of the four target schools to identify and select three to five school staff who were familiar and worked with the EWIR to participate in the study. These staff persons included assistant principals, professional school counselors, ninth grade academy team members, and teachers.

The sections that follow present the findings from this inquiry within the framework of a cross-case analysis, beginning with an overview of the data on (a) the district's efforts to support the EWIR implementation, (b) each school's use of the EWIR

report, and (c) the challenges that each school faced when using and implementing the report. The researcher then presents a cross-case analysis that identifies similarities and differences in the ways that staff at the four schools used the EWIR report.

While the section presents the data within categories separately, there is some overlap. Additionally, participant responses to interview questions often addressed more than one category. During the analysis, the researcher placed the data with the most appropriate category.

**Directives and Suggested Measures from the Central Office**

During the study, participants from the central office, Steven and Eddie (pseudonyms), provided feedback on the support offered and directives given to the target schools regarding their use of the EWIR. Steven and Eddie's roles were to support schools across the district. The key themes that emerged from the interviews with Steven and Eddie include required structure, accountability, professional development, and EWIR changes.

In addition to its use in the schools, the EWIR enabled central office staff to examine student data at the district level to see how many at-risk students each school served. It also allowed them look at data from feeder middle schools and provide suggestions to the district personnel managing those schools about changes that they could make to prepare students more appropriately for high school. According to Steven,

> Yes, I definitely use the report. And also, it helps me as it relates to looking at… because schools and zip codes kind of go hand-in-hand to me for the success of schools…So, I can see how many students…or the percentage of at-risk students are feeding in to a particular high school.

Eddie explained how he used the EWIR, "[I] created the model and report that creates the data. I do not work in schools directly. I do the data analysis. It's a chicken and egg kind of thing. I create data to get it to the right stakeholders in the school so they can use it."

**Required structure.** Steven and Eddie indicated that district staff did not provide strict requirements to principals on required structures schools should have in place for using the EWIR to improve ninth grade promotion rates. Steven did note, however, that "each school had to identify a team that would review data from the EWIR and develop interventions for students that the report identified as being at risk."

Steven commented that the central office team "developed an action plan designed to provide guidance on how schools should respond when the EWIR identified students at-risk of retention." The plan suggested that schools take the following actions (see Appendix E: Early Warning Indicator Action Plan [9th Grade]):

- develop a list of interventions;
- establish the tasks necessary to achieve established objectives;
- create success criteria that will aid in monitoring students' progress;
- determine a time frame for implementation of established interventions;
- identify the necessary resources;
- develop a communication plan that will facilitate information sharing with teachers, students and parents;
- identify the challenges with implementation; and
- determine how each stakeholder will support the Intervention Plan.

According to Steven, the action plan was "more of a targeted approach to what they're doing as opposed to just giving them a time to say here's the list." The central

office leadership team assigned one district-level liaison to each school to assist with monitoring the staff's implementation of the EWIR. This liaison was to meet with their school's EWIR team on a monthly basis to discuss the students that the EWIR identified as being at risk and monitor the implementation of the team's action plan (E. George (pseudonym), personal communication, 2014). Steven explained that the liaisons were responsible for gathering information that addressed a number of questions, including, "What are we doing? Are we making progress towards success? What else can we do? Do we need to change schedules, change classes, get them in extended learning opportunity…whatever needs to be done…a mentor,… etc." (Steven). Principal supervisors also monitored use of the EWIR, although their focus was more on what was happening with ninth graders than on the tool. The supervisors monitored the use of the EWIR by "checking in with principals on how they were using the report and asking about their action plan for ninth graders" (Eddie).

**Accountability.** Steven explained that the "central office put measures in place to serve as a guide for schools using the EWIR; although there were no consequences associated with not using the guide." According to Eddie, "There isn't any explicit accountability for using EWIR." On the contrary, "[S]chools only faced consequences when they failed to increase ninth grade promotion rates. There were no measures of whether or not schools actually used the EWIR data" (Steven). Instead, the district measured the schools on the outcomes they had to achieve based on actions associated with the data in the EWIR. Eddie noted that one of the principals' goals for the year that the study took place was to increase ninth grade promotion rates by 5%.

**Professional development.** According to Steven, the central office staff provided professional development (PD) on the EWIR to principals at the beginning of the school year as part of a principals' meeting. Eddie explained that the principals' PD focused on helping them understand "what the data means and how to interpret it." Ongoing PD occurred on a case-by-case basis. If a school requested it, a contact from the central office provided additional support. Steven explained that since there was no one person dedicated to supporting the implementation of the EWIR, there was sometimes a challenge with timeliness due to capacity constraints:

> This is not my job; this is still 'other duties' as a side job…. This is just something I like to do. But that's just kind of how it is. That's why I don't set schedules to go to every school and talk about this, because it's not somebody's job.

In sum, the respondents indicated that while the district provided some PD around the use of the EWIR tool, it was limited and typically focused on the principals.

**Current and future changes.** Eddie explained that going forward, the central office would be implementing changes to encourage new ways of using the EWIR that would be more effective in increasing ninth grade promotion rates. According to Eddie, these changes included the re-organization of funding allocations and improved access to the EWIR. Steven explained that the central office had listened to schools' feedback and stated that for SY 2016, "the school budgets include provisions for additional funding based on the percent of at risk students entering in ninth grade."

At its inception, "the EWIR was a spreadsheet document maintained by two people in the central office who had to distribute individual school reports to each

principal every quarter" (Steven). It was then the "principal's responsibility to distribute the report to various staff members" (Steven). Since the time of this study, the distribution process for the EWIR had evolved to provide more real-time data (Steven). Eddie explained, "The EWIR has been integrated in to the district's data warehouse, which allows the report to include the most up-to-date student data and enrollment information." Each school received its report through its own "online portal that staff involved with the ninth grade academy (e.g., administrators, counselors, pupil personnel workers [PPWs], and testing coordinators) could access directly" (Steven). As Steven noted, "[It] makes them make better decisions and do so faster, etc." He explained that "allowing staff at various levels access to the report reduced the bureaucracy and improved the efficiency of the data review process."

Respondents indicated that providing real-time access to data supported the school district's focus on data-driven instruction. Steven asserted that the EWIR served as a tool in helping schools understand students' academic status and identify any areas of deficiency. He further explained the role that the data played in highlighting areas for improvement:

> I think one thing that's beneficial is putting some teeth to it or mathematics to a problem. So, it makes what's invisible visible…I think data has the ability to do that. So, like transforming data to improve student achievement. That's my ultimate goal. Using data sets to improve student achievement; not to use it as a hammer to browbeat, but to use it more like a flashlight, to illuminate something that was in the dark.

Eddie explained that there were benefits to bringing attention to the issue of ninth grade retention. He stated, "For example, [the data] can shine light on middle schools, if, for example, 25% of their students do not pass 9th grade. As a result, they are coming from middle school unprepared."

**Challenges**. The respondents from the central office shared that one main challenge with the implementation of the EWIR was the autonomy that schools enjoyed. As Steven noted, "Central office gives the schools autonomy to develop their own intervention strategies." He explained that, as a result, there was no consistency in the development of these approaches, and not every school committed whole-heartedly to its use of the EWIR. Steven elaborated on how autonomy influenced this varying level of commitment and use of the tool:

> I give them autonomy to come up with the strategy, intervention…whatever…for that particular clientele, because I don't want to say that "You have to do this" for every school because they have leadership teams. So, my only concern is that sometimes what's written and what's implemented…there's some gray within that. So, it may not be implemented with fidelity across the board at every school, but one thing I do know is that the promotion rate is increasing.

**Best practices**. When asked to reflect on best practices at schools throughout the district, Steven and Eddie identified two key approaches. According to Steven, the most effective use of the EWIR occurred in schools that used a combination of the various data points in the EWIR to influence the scheduling of students and provide support for students who were most at risk of retention. Steven also noted that "school leaders who used the data to focus on doing a few interventions well demonstrated effective

implementation of the EWIR because they were not trying to do too much." Steven providing the example of schools that placed ninth graders in a certain part of the building; assigned at-risk students to various administrators in the schools that checked on the students and held them accountable for attendance, schoolwork, etc.; and/or developed of mentoring programs. Eddie noted, "Some schools recognized students' efforts in school beyond the traditional paths. Examples of nontraditional include acknowledging students who moved from red to yellow or those who increased their GPA."

**Research Question 1**

The first research question asked, "*How are school personnel across four schools in this case study from Wyatt School District (two with increases in ninth grade promotion rates and two with decreases in ninth grade promotion rates) using the Early Warning Indicator Report to improve ninth grade promotion rates?"* The sections below provide a summary of how Adams High School, Boyd High School, Cooper High School, and Donaldson High School use the Early Warning Indicator Report.

**Adams High School**

Interviews at Adams High School took place over two days with the principal (Samantha), ninth grade administrator (Ronald), a counselor (Jessica), and a teacher (Katherine) who was on the ninth grade academy team. The interviews ran between 25 and 40 minutes. The most in-depth discussion occurred with the teacher. The principal at Adams High School had held her position for over five years and had over 20 years of education experience.

**Use of the EWIR.** According to Samantha, at Adams, "[The] EWIR is used to identify…students who are most at risk for not being promoted to the tenth grade." Samantha saw the report as a tool to help the school fulfill its responsibility to "make sure we touch that child and we provide them support, because the end result is moving the child in a positive direction." Data from field observations and staff interviews indicated that the staff at Adams placed a primary focus on students in the red category; however, Ronald commented that "they did keep an eye on ninth graders in the yellow and green categories as well." Jessica noted, "The EWIR helps us to know where our students are and prepare for them before they even get here." The respondents' remarks on the school personnel's use of the EWIR at Adams High School fell into the following eight categories: (1) interventions, (2) impact on instruction, (3) parent engagement, (4) structures in place at the school, (5) ninth grade academy, (6) accountability, (7) central office support, and (8) challenges with implementation.

***Interventions*.** Katherine explained that once the staff at Adams reviewed the EWIR, they "[used] that data to try to develop interventions where needed. This is particularly true for those students who are in the red." Ronald also noted that the "interventions suggested for students are both instructional and non-instructional." Samantha shared that "the school district had implemented a major instructional intervention that focused on literacy." She explained that, as a result, "[Adams] staff began identifying students who were not meeting established standards and developing specific classroom interventions that would positively impact the student's performance. Through these efforts, school staff hoped to address various academic challenges identified by the EWIR." Katherine noted that students also "received tutoring after

school." Adams staff also "implemented a Response to Intervention (RTI) for at-risk students" (Katherine). RTI helped schools to improve upon their identification of students with learning and/or behavior challenges, and a number of schools and districts have utilized the tool in their early intervention and prevention efforts (Klingner & Edwards, 2006). Lastly, Samantha stated that the staff at Adams "offered a course to assist students who were struggling with reading in the ninth grade. These interventions helped students to improve their SRI scores and grade point averages reflected on the EWIR."

According to Katherine, Adams staff also used the data from the EWIR to identify non-instructional interventions that addressed students' behavioral and attendance issues. In one example of these non-instructional initiatives, the staff at Adams "used outside community organizations to provide mentors to at-risk students" (Samantha). According to Ronald, "students [also] had mentors within the school." Samantha explained that school staff designed the mentoring program to provide an adult that would hold the students responsible and serve as an adult that students could trust and with whom they could have candid conversations. She also shared that students at Adams had a large number of absences, so the staff developed an Attendance Committee at the school to provide supplemental support to these students. The school's PPW also conducted home visits when needed if students continued to demonstrate truancy from school (Katherine). Jessica explained that increased interaction with counselors occasional served as another useful intervention.

***Impact on instruction***. Respondents from Adams indicated that the EWIR had a direct impact on instruction. Katherine, for example, explained that at Adams, school

administrators focused on the importance of using the EWIR data to drive the instruction in the classroom:

> Teachers who are a part of the EWIR committee are able to see the students. We look at them on paper; we see the strengths, their weaknesses and then we see them in the classroom. So, it's kind of, like for example, if I know that this particular student has a hard time with polynomials or whatever subject matter we may be covering in math; I'm going to make sure that in my delivery I'm going to have that student maybe in a small group with his or her peers where it's somebody maybe very strong at that particular skill, just to make sure that they get the individualized or as much of the individualized attention that they can in the classroom.

Ronald noted, "Teachers are able to see where the students are, so they differentiate instruction for particular students." When asked about the most beneficial aspect of the EWIR, Katherine stated, "It's a good reference for where students are academically and where we need to intervene…I guess…how we need to strategize our instruction to meet the needs of the students who fall in all three of those categories." Samantha explained,

> It just provides a myriad of information and sometimes students would come in with just discipline information, but could have a 4.0. So what's going on, is that scholar challenged, I mean what's going on? So, this to me provides an adequate snapshot and profile of a scholar amid actually sitting and talking with the scholar yourself.

***Parent engagement.*** Respondents noted that the staff at Adams High School was very purposeful about engaging parents to support students identified as at risk on the

EWIR. Ronald considered parent engagement to be more than speaking to parents about their children; it included engaging them in the outcomes, and ultimately the success, of the students. To that end, Adams staff held conferences with both students and parents to explain the data in the EWIR and get feedback on possible causes of the challenges that the students faced (Jessica). These conferences began before school started for the year. Samantha explained, "[Prior] to the school year starting, we will invite the student and the parent, or the family unit, to come in for a conference and just lay down what high school looks like and how to be successful." Adams staff would continue to communicate with parents throughout the school year about students' status on the EWIR.

***Structures in place at the school.*** Katherine shared that Adams had a team that focused specifically on working with the EWIR. The team included a variety of members who adopted a "whole child" approach. Samantha explained that the principal served in "an advisory capacity to the team." She noted that this team included the ninth grade administrator, ninth grade counselor, core and elective teachers, attendance secretary, pupil personnel worker, a representative from the wraparound services offered in school, and "anyone else that is needed at that time." The National Education Association (2014) described wraparound services as follows:

> Local service providers that complement and are aligned with effective instruction and other work done by the school. These services—sometimes at or near the physical school site—can include:
>
> - primary health, mental health, and dental care
> - family engagement, including adult education
> - preschool learning

- academic enrichment
- expanded after school learning time or summer programming
- mentoring
- postsecondary education and career options awareness (National Education Association, 2014, p. 1)

Jessica shared that the school also had a separate attendance committee that focused only on the attendance data in the EWIR. Both teams met on a weekly basis; however, due to the nature of the work, teams occasionally met on an *ad hoc* basis, as needed (Ronald). Katherine added that the ninth grade team met during collaborative planning periods, which were specific times during the school day when teachers worked together to plan lessons across subjects and discuss individual student needs.

According to Samantha, the ninth grade administrator (assistant principal) at Adams led the day-to-day work of the EWIR team. She explained the typical process:

> The assistant principal takes that data, and then he meets with the various members of the team… They work on collaboration regarding instruction. They collaborate regarding student behavior. They collaborate regarding looking and analyzing student work, which also aligns with our lens on literacy. We know that students are more successful if they're able to read, write, and reason.

The team also developed initiatives and activities for students.

Katherine noted that the teachers at Adams were responsible for reviewing the data for their own students and identifying needed interventions. Teachers examined the EWIR data and analyzed it from their classrooms to monitor student progress with a real-

time lens (Ronald). Katherine provided the following explanation for why Adams kept track of students in yellow and green categories:

> If they are high performance students, then [we] make sure that we are supporting them to maintain their green status; and then [we look] at our yellow and red students to see what we can do to make sure that they advance or reach levels of proficiency in whatever areas they are lacking.

***Ninth grade academy.*** Samantha explained that Adams High School placed all freshmen students together in a cohort in the ninth grade academy. The school assigned a group of teachers to the academy that worked with all ninth grade students, and the students took classes in one area of the school identified for ninth graders only (Ronald). Katherine added that teachers in the ninth grade academy were "involved in developing initiatives or activities and programs for students that either serve as incentives or rewards or in some way promote the mission and the vision of the ninth grade academy." These same teachers were also part of the team that reviewed the school's EWIR.

***Accountability***. According to Samantha, Adams High School did not have a formal structure in place to hold school staff accountable for using the EWIR. Steven explained that this lack of accountability extended to the principal, whose evaluation tool, administered by the principal supervisor, did not include any measure related to the EWIR. Instead, Samantha noted, the district required that principals submit a quarterly ninth grade accountability plan to the central office that outlined the specific interventions the school staff would implement for students the EWIR identified as at risk. According to Ronald, the district then held the school accountable for using the plan

to improve their ninth grade promotion rate, and the EWIR served as an essential tool in achieving that goal.

***Central office support.*** Respondents stated that the staff at Adams High School received minimal professional development on the use of EWIR. Only the principal, Samantha, reported receiving guidance on the tool:

> They really had to show us what this information was about and how helpful it could be. The other guidance and support from central office would be in conversations, coaching sessions, with principal supervisors…with principals and administrative teams. How are you utilizing EWIR are in order to inform instruction? How are you using the EWIR are regarding home visits, and literacy and the like? So, it's more in the form of coaching and then monitoring the ninth-grade plan, which is inclusive of EWIR.

Ronald explained, "It took the team a while to really get our hands around how powerful this tool [EWIR] was for us in reaching our struggling students." Katherine noted that professional development would have reduced the time the EWIR team spent trying to understand the data in the tool and how to best use the resource.

***Challenges with implementation***. Participants identified three main challenges to implementing the EWIR at Adams: professional development, punitive measures, and a failure to place sufficient focus on students in green and yellow categories.

Samantha noted, "[It] would be helpful for professional development to be provided to school teams." Katherine agreed, suggesting that "receiving professional development on the EWIR would be helpful to the staff within schools." By not receiving professional development, the staff at Adams were "left on their own to figure

out how to use the tool, and there may be better and more useful ways to use the report" (Katherine).

Katherine also claimed that implementation was hindered because some staff viewed the EWIR as a punitive tool instead of a positive one. She appeared very hesitant to elaborate on this issue:

> [It] does feel [as if] there is fear associated with using the tool. Not always being presented as being helpful, but from a negative view that schools better move the numbers, or else…. When it's presented to teachers, there should be a point made to identify how this could be a tool for us to help our students, as opposed to it being a tool to show [progress or be used to show areas where there could be more impact for students]. There is fear associated with it…If the language of the way it's presented could be done in a way where fear is not associated with it… and then the implications of what could happen if we don't use this data and our students are failing…then it falls on the teachers and it becomes kind of…there's just a negative connotation with that. So, I would want the way in which we use it in the way the communication…the administration with teachers as they use this data would be less negative.

According to Ronald, implementation of the EWIR proved difficult because staff tended to focus largely on students in the red category, which resulted in some yellow and green students dropping to a lower red or yellow category. Katherine agreed, "That was an area of concern. So, this year we're starting off by trying to equal our focus on the students in the green, as well as the students who are in the yellow or who are definitely in the red."

In spite of these challenges, the staff at Adams High School embraced the use of the EWIR. By integrating the report in to the analysis of ninth grade student performance and identifying areas for improvement, Adams experienced an increase in ninth grade promotion rates.

**Boyd High School**

Interviews at Boyd High School took place over the course of one day, and the participants included the principal (Jeffrey), ninth grade administrator (Rachel), ninth grade academy coordinator (Lucas, who was also a teacher), and the former assistant principal (Bradley). The ninth grade administrator, Rachel, had been at the school less than one year, and the principal had been in the position less than five years. The interviews ranged from 20 to 55 minutes.

Some ninth grade students interrupted the interview with Lucas on a few different occasions. The researcher took those opportunities to ask them about the EWIR; however, none of the three students were familiar with the report.

**Use of the EWIR.** According to Jeffrey, Boyd High School staff used the EWIR to monitor student's progress on a quarterly basis during their ninth grade year. Jeffrey explained that the staff placed a significant focus on analyzing the EWIR data prior to the start of school to "identify students who are in need of support and provide them with intervention support counseling sessions, parent meetings, over the summer prior to them coming in their ninth grade year." The early identification of students allowed Boyd staff to intervene with students early in their high school tenure (Bradley). Lucas noted that using the EWIR to improve ninth grade promotion rates was beneficial because "you know early who your kids are that should be struggling." The use of the EWIR at Boyd

High School fell into the following categories: (1) interventions, (2) impact on instruction, (3) parent engagement, (4) structures in place at the school, (5) ninth grade academy, (6) accountability, (7) central office support, and (8) challenges with implementation.

***Interventions***. Jeffrey commented that when Boyd staff evaluated the data in the EWIR, they could gauge students' risk level using academic and non-academic factors. He explained, "[Kids] that are identified in need of support are assigned supports and differentiated interventions based on their needs." To provide academic interventions, Boyd staff offered tutoring after school, and teachers implemented their own specific strategies, based on student needs, in the classroom (Lucas). Bradley shared that staff also used scheduling to intervene for students who were in the "at risk" category of the EWIR. As Bradley stated, the staff focused on "making sure [at risk students] were actually placed in the right classes and actually placed with the right teachers that would help them be successful in high school."

Bradley also noted that one of the non-academic interventions provided to at risk students involved assigning teachers and administrators as mentors to students. He felt that this initiative was very helpful for at-risk students:

> We had those teachers who are gifted at being mentors. I think our last two or three years we were able to get, I'd say, two or three key people on our team; especially male teachers…male educators that really helped with our young men achieving in the ninth grade. That was a great benefit.

Rachel added that the school's PPW or resource officer would also intervene with students who had low attendance rates.

***Impact on instruction.*** Most of the respondents from Boyd agreed that the EWIR had a positive impact on instruction. Bradley stated that the school district "stressed the importance of teachers using data to drive the instruction. So, basically looking at where the kids are, looking at the structural needs of our incoming ninth graders, you know they develop lesson plans." Lucas also commented that the tool allowed teachers to see different aspects of a student, including the areas in which they might be struggling or excelling, which could be valuable in identifying a student's instructional needs:

> You know early who your kids are that should be struggling…. And you get to see the outliers…the kids who have bad average and high reading scores. It gives you an overview of who you're dealing with, and what kinds of instruction you might need to bring to a particular student.

Jeffrey categorized the EWIR as more of an intervention tool than an instructional tool, because it did not provide insight into why students performed in a particular way:

> It is more an interventional tool than it is an instructional tool, because it doesn't provide data that…it provides data of poor performance, but it doesn't tell why the performance is poor; and that's what you kind of need in order to have instructional intervention…is that you need to have why the kid is not performing well.

Rachel also noted that the EWIR impacted instruction and provided valuable information used to identify student interventions.

***Parent engagement***. At Boyd High School, staff viewed parents as an integral component of improving the performance of students (Rachel). Lucas shared that staff typically went one step further with parents of at-risk students, because they did not want

to foster a relationship where they only talked to parents when students were in trouble. According to Lucas, the staff called parents of students who were at risk of retention to notify them of instances when their child was doing well. Those conversations opened the lines of communication between the school and parents and encouraged parents to reach out to schools directly (Lucas). He explained, "The calls also commonly included discussions about other ways parents could assist their students."

Bradley also stated that the staff at Boyd met with parents on a quarterly basis. He explained that during these meetings, staff tried to engage parents and get them involved in their student's educational process:

> [We talk] about particular strategies we're going to have in place to help our kids be successful in the ninth grade. Most importantly, we try to solicit parent involvement, getting parents to be involved, be more vocal. Letting them know what's going on academically as well as emotionally and behaviorally with their child. Then we have a lot of our teachers build a relationship with the parents and network with the parents and building good communication with the parents, that's the key.

According to Lucas, group parent meetings were about two hours long; and they provided general information about how parents could become more involved with the school and their students' educational process. Individual parent meetings lasted approximately one hour and served as an opportunity for teachers to provide parents with specific feedback about their students and present strategies for improving students' grades and behavior (Jeffrey).

***Structures in place at the school.*** Boyd High School staff used a team structure to address students identified as "at risk" by the EWIR (Rachel). According to Jeffrey, "The team included the principal, two ninth grade assistant principals, ninth grade guidance counselor, ninth grade academy coordinator, the PPW, and teachers." Bradley explained that the principal advised the team on the decisions they made and helped with prioritizing, "delegating the right activity to the right people, and putting the right people in place to implement the program with fidelity." The principal also focused on dedicating the resources (i.e., staff and funding) needed to use the tool effectively so the teams could focus on the EWIR and plan interventions for students (Bradley). Lucas commented on the effectiveness of the principal's provisions, which encouraged school staff to work together to analyze the EWIR data: "[The principal] puts in place the opportunity for us, using the resources that allow us to come together….[This includes] those day-to-day costs, because we [also] need subs for those teachers." As a result, the EWIR team could met during the school day to review the data and identify student interventions because the administration provided teachers who were on the EWIR team with substitute teachers to cover their classes (Lucas).

The team used the data from the EWIR to create a data wall to evaluate their students (Rachel). Jeffrey provided the following explanation:

> The whole team is responsible for monitoring a group of students. Everybody's also responsible for accessing the EWIR data to find out where the gaps exist for individual students and to develop action plans, also referred to as student success plans, for each of the students that are in the red category.

As she discussed teachers' roles on the ninth grade team, Rachel highlighted the fact that teachers often went beyond the call of duty, as outlined by their contracts, and were passionate about using the data in the EWIR to identify ways to help students improve. Rachel shared that she had heard teachers say, "I'm going to take this student. I'm going to mentor the student." She added,

> Just to see the teachers go outside of the "contract" or what they do during the duty day to assist the students to get them where they need to be academically. I mean, that's awesome. That's awesome. So, when they say you gotta love it to do this, I mean, they really love it.

Jeffrey shared that an additional responsibility of the assistant principal was to meet with feeder middle schools during the spring prior to students' first day in the ninth grade to identify any potential challenges that the EWIR failed to ascertain. He explained that this information, along with the EWIR, helped Boyd staff to create action plans before the school year started.

***Ninth grade academy.*** According to Lucas, Boyd staff grouped all ninth grade students together into a ninth grade academy. Rachel stated that "as part of the academy model, the team created a data wall for all students that was color-coded based on categories in the EWIR." She explained that the data wall also included names of mentors, identifiers for special education, and an identifier for English language learners. Bradley noted that the ninth grade academy helped teachers really learn about and monitor their students:

> Teachers were able to monitor how these students were doing academically as well as attendance. Also, we looked at, you know, seeing what the kids are doing.

> Have they made any improvements since coming from middle school to high school? Are they involved in activities?

***Accountability.*** Jeffrey, Bradley, Rachel, and Lucas stressed that there was no real accountability structure for using the EWIR at Boyd. As Jeffrey noted, the principal and the school were simply accountable for increasing the promotion rate of ninth graders. Lucas summarized the sentiments of the participants from Boyd with the following statement:

> Well, like I said…because it was such a cohesive ninth grade team, we really had…we only answer to ourselves. We set our agenda, and we had agreed collaboratively…these are the strategies we're going to implement. So, we answer to ourselves, and the outcome was our success in the last couple of years and getting it up and keeping it there.

***Central office support***. According to Jeffrey and Bradley, Boyd staff received limited assistance from central office with their implementation of the EWIR. Like the participants from Adams, Jeffrey noted that the support they did receive primarily targeted the principal and administrators. Bradley shared his thoughts on the professional development that the central office offered:

> No, I wouldn't say we had professional development. It was just like [an] information session where they just show you where your kids are…this is your list, and they ask you some questions to guide your thinking about how to use it. But professional development, no…

Lucas concurred, stating, "No, other than the initial explanation of what it was, we've kind of pioneered how it's used. And it is not just us; it's everybody who's established a

ninth grade academy over the last few years." Additionally, Rachel was not aware of any professional development, except for the training provided to the principal.

***Challenges with implementation.*** Like the respondents from Adams, the participants from Boyd High School stated that the staff primarily focused its intervention efforts on supporting students in the red category on the EWIR. They each noted that, as a result, the staff sometimes overlooked students in other categories (Jeffrey, Bradley, and Rachel). Jeffrey explained, "The students in red are the priority. Those students have the greatest likelihood of being retained, and it is our goal to ensure that they are not. We spend most of our time talking about students in red." Bradley shared that ideally, Boyd staff would also increase their focus on students with special needs:

> If I had to do it over again, we would probably focus more on helping out special needs' students. They tend to get left out in the process. Mind you, we still monitor them but we didn't really put forward a strong, I believe we didn't put forward a strong enough effort to make sure they were inclusive in our data focus.

Lucas noted that the failure of the school staff to share the EWIR with all ninth grade teachers was another challenge in the implementation of the report at Boyd:

> It would be beneficial in a stripped down version, to all the teachers…particularly the ninth grade teachers. It's got their SRI scores for math and reading, it's got their attendance, it's got their suspension rate…all the things that you can use that I think an adept classroom teacher could use in some way, shape, or form to create a rapport with their students.

Jeffrey, Boyd's principal, explained that in the coming year, he hoped to address the challenges of providing support for students in all color categories on the EWIR and

sharing EWIR data with more ninth grade teachers. He noted his focus on continuous improvement in how the staff used the EWIR, in combination with other strategies focused on ninth graders, have been components of the school's experience with an increase in ninth grade promotion rates.

**Cooper High School**

Interviews at Cooper High School took place over the course of one day with the principal (Sean), a counselor (Nancy), and an administrator (Cindy). The interviews typically lasted 25 to 45 minutes; however, the discussion with Nancy lasted the longest. The principal at Cooper had been in his position for over five years.

**Use of the EWIR.** According to Sean, the primary goal of the EWIR at Cooper High School was to reduce the number of students at risk of retention and ultimately increase the ninth grade promotion rate. Nancy stated, "With that goal in place, every other thing just kind of falls into place as it relates to what type of …what actions are needed." Cindy noted that the EWIR provides as roadmap for the administration at Cooper regarding their ninth grade students. Participant responses regarding the use of the EWIR at Cooper High School fell into the following categories: (1) interventions, (2) impact on instruction, (3) parent engagement, (4) structures in place at the school, (5) ninth grade academy, (6) accountability, (7) central office support, and (8) challenges with implementation.

***Interventions***. The respondents stated that the staff at Cooper identified attendance as an important predictor of students' performance at school. As Nancy noted, to learn, students had to attend class. As a result, she explained, the school's PPW and community partners placed a large focus on making sure students attended school

and were in their classes. Sean shared that, as part of its plan for intervention, "[Cooper] staff utilized mentors to help address attendance, behavior, and academic challenges." Cindy added that the staff assigned mentors through the school's community partnerships. Sean also mentioned that Cooper used mentors through school partnerships and noted that students benefitted from establishing adult relationships outside of the school.

***Impact on instruction.*** All study participants from Cooper believed that the EWIR influenced instruction. Sean, for example, stated that teachers played an important role in establishing interventions that led to student success:

> We also, in the past, have used the ninth grade team, or ninth grade teachers, to assist with the early warning reports, so that we could get their assistance in understanding how the data impacts them as teachers…how they could impact the data and provide the necessary interventions in the classroom to assist the students.

Nancy also commented that the EWIR was useful in identifying and informing teachers about students who were at risk of retention. Cindy explained that teachers could identify instructional interventions based on their analysis of the EWIR.

***Parent engagement***. Nancy worked with the school's community partners to engage parents in the process of improving EWIR outcomes for students in the red category. She explained that Cooper's community partners provided resources to help parents help their children. "There are a couple of outside community resources that we have access to. We have an outside organization who assists us with doing home visits, providing resources to parents, and having the right contact with the parent component."

Sean also mentioned the community partners' engagement with parents. Cindy stressed that the staff did not share actual EWIR data with parents, but they did notify parents about areas in which the EWIR indicated that their student needed improvement.

***Structures in place at the school.*** Cindy explained that the team that reviewed the EWIR at Cooper primarily consisted of the school's Student Intervention Team (SIT). The SIT is a structure that already existed in schools throughout the district, and was responsible for identifying all students within a school who had consistent behavioral and/or academic problems. According to Sean, the SIT, along with a few additional team members, reviewed the EWIR data and identified interventions designed to move students from the at risk category. He stated, "This team included administrators, ninth grade teachers, a counselor, a PPW, and a community outreach assistant."

Sean noted that the staff at Cooper placed a significant focus on adult interaction with students in the red category. Administrators, including the principal, stressed the importance of addressing behavioral problems with students (Cindy). Sean explained, "Teachers and counselors addressed academic issues…[and] the PPW and community outreach assistant made home visits to speak with students with attendance problems and their parents." Cindy noted that community partner organizations would also make home visits and become an extension of the school by providing resources to parents. As a result, she explained, parents became more aware of how they could assist their children and help them to improve in various areas, including specific categories in the EWIR in which the student might be deficient. Sean provided the following explanation:

> The professional school counselors are in charge of monitoring the student's credits, scheduling parent-teacher conferences for those students, following up

> with teachers, making contact with parents as needed. The student advocates and counselors have direct contact with the student, can meet with the student throughout the day...during lunch…and can also do observations in class. The PPW will look at the attendance aspect of that student to see if that's an issue to kind of monitor and see what interventions needs to be in place; whether or not we need a community partner to go into the home. These partners go into the home…make that contact with that parent to let them know that we are reaching out and we need them to reach back.

Nancy added that the school ensured that ninth grade teachers were a part of discussions about the EWIR results, as they helped to provide insight into how the data impacted teaching in the classrooms. The partner organizations focused on developing students' academic, social, and behavioral needs (Sean). Nancy explained that the complete team met bi-weekly for 90-120 minutes, with smaller ad hoc meetings, as needed.

***Ninth grade academy.*** Cindy commented that the structure of the ninth grade academy at Cooper was not like that of other schools in Wyatt School District. According to Nancy, Cooper was a small school, so the staff could not put all ninth graders into one cohort. Nancy explained that the academy included students who were not already a part of the school's Career and Technical Academy Program (CTAP). CTAP students, along with those in the ninth grade academy, participated in collective activities inside and outside of the school (Sean).

***Accountability***. Sean stated that there was no formal structure in place to hold school staff accountable for using the EWIR:

> It's not a "principal said" type policy. I think the things that we put in place, as far as interventions, are things that people agree to do. If they don't do it, we just… It's just a matter of following up, and if they can't do what they say that they're gonna, do then we have to find someone else. I think that's what accountability is. It's nothing we're forcing down their throats; it's more…it's something you said, "Based on the data, here's how I can work with these students." So, it's not, "Take these students and make them achieve." It's, "These are the students I can help to achieve." I think it's just a different way of looking at it.

He noted that without a formal structure for the accountability, there was an additional responsibility for the principal to monitor the staff's use of the EWIR. Nancy stated that she and the EWIR team held themselves accountable for using the tool. Cindy echoed this sentiment, stating that the staff "hold[s] each other accountable" for using the EWIR to improve ninth grade promotion rates.

***Central office support.*** Sean noted that staff at Cooper received support from the central office for the implementation of the EWIR on an *ad hoc* basis. According to Sean, the central office provided school staff with an idea of the implementation process they should use, but the school had the option to implement the interventions they felt would be most beneficial to each student. Sean made the following statement:

> Central office has put things in place that we have a little bit more autonomy in developing our interventions. Because it's not something new, it is something that we should have been doing all along. So, it's not a new thing; so, [we have] a little bit more autonomy.

Cooper received financial support from the central office during the second half of the school year to provide additional assistance to students who were most at risk of retention. Cindy shared that the school used the funding to pay teachers to offer online credit recovery to students who were in the red category. Sean commented, "Last year, I knew that I didn't have the money to pay for teachers to do quarterly recovery; and actually, I was provided funding to do quarterly recovery, and it made a difference in our data." According to Sean, even when funding is not available, administrators often ask teachers to go beyond the requirements of the school day. Nancy explained that the central office did not provide any professional development and noted that "only the principal received PD on the EWIR."

***Challenges with implementation*.** Sean stated that "it would be helpful for schools with a greater number of students identified in the red category in the EWIR to receive additional funding and resources that would enable them to provide more interventions to at-risk students." He noted that districts should provide this support at the beginning of the school year based on the number of high-risk students the school served. Sean also explained that continuous funding was necessary so that staff could follow those students through the 12th grade. Sean went on to ask the question, "If funding dropped after ninth grade, what happened when students still needed some level of support in tenth grade?" He saw this potential funding as a benefit to Cooper and all of the other high schools in the area:

> I have enough reading teachers that reading goes not only ninth grade, but goes through the years until they get back on grade level….First is, you're only gonna get it ninth grade. It's basically saying, "We hope you improve and you get it no

more." That's not solving the long-term problem of when a kid didn't get it… maybe not in middle school…maybe not in elementary…You could pay at the end, or pay in the front; you still have to pay for it.

Sean highlighted the potential risk of failing to consider students who still needed support in the tenth, eleventh, and twelfth grades.

Nancy noted, "Being a small school made it difficult to implement the EWIR and ninth grade academy throughout the whole ninth grade." Cooper High School incorporated various aspects of the EWIR to assist with providing ninth grade students with the support needed to impact ninth grade promotion rates. Unfortunately, during initial phases of implementation, the school experienced a decrease in the promotion rate for its ninth graders.

**Donaldson High School**

Interviews at Donaldson High School took place over the course of one day. The participants included the ninth grade administrator (Robert), a counselor (Barbara), and a ninth grade academy teacher (Eric). The interviews ranged from 25 to 65 minutes. At the time of the study, the principal had been in his position for over 10 years.

**Use of EWIR**. Donaldson High School used the EWIR to identify students who would be a part of the school's ninth grade academy (Robert). According to Eric, Donaldson selected 50 of their most at risk students for the academy. The respondents'' discussions of the EWIR at Donaldson High School fell into the following eight categories: (1) interventions, (2) impact on instruction, (3) parent engagement, (4) structures in place at the school, (5) ninth grade academy, (6) accountability, (7) central office support, and (8) challenges with implementation.

***Interventions***. According to Robert and Eric, staff at Donaldson identified both instructional and non-instructional interventions that would improve the academic performance of students identified as at risk. Robert noted that teachers viewed the data and assigned interventions based on each student's needs.

Eric explained that parents played a major role in the school's non-instructional interventions. He stated, "For us, it's a lot of parental outreach and it's not always the most successful, but we know at a certain point it's what the parents are doing at home." As a result, staff spent a lot of time focused on parental engagement (Robert). The Parental engagement section describes this work in more detail. Barbara noted that the staff also assigned mentors to at-risk students through a partnership with a local university.

***Impact on instruction***. Participants from Donaldson agreed that the EWIR had some level of impact on instruction for students in the red category. Barbara, for example, explained, "[If] you know the scores from our students coming in, and you know where they are, it gives you kind of a baseline to know what level that they're on." As Eric stated, this information helped teachers and other school staff identify interventions that could already be in place for students in the red category when school started in the fall. Robert also noted that staff enrolled students in the red category in a single course that offered teachers the flexibility to alter the course content according to the needs of their students:

> We know where they are, based off of the early warning indicator list. So, the [basic] science class is giving them an introduction to all of the sciences, but the main focus is on preparation for bio. And also, one of the things we do there is

> we…if there is something going on in math that they're struggling in, [the teacher] in science uses that time to go back and reinforce and then do a little bit more of the science. Because the course is important, but it's nowhere near as important as it is for the algebra and the English in preparation for what they have coming ahead.

***Parent engagement***. Robert commented that parents were a primary focus at Donaldson, and that the staff took steps to engage them throughout the school year in efforts to improve ninth grade promotion rates. He provided an example of this effort that took place during quarterly parent meetings.

> The first meeting was just an introduction and an overview of the whole program. Next quarter, it will be where the social studies teacher does a lesson where the parents are involved…and just to make sure that everybody's on the same page. But in between there, if their student's having difficulties, we have an intern in guidance that contacts the parent and schedules an individual meeting with those four teachers.

Eric also noted that Donaldson staff provided multiple options for parent/teacher conferences. Most of the meetings took place during the school day, which occasionally conflicted with parents' availability, so teachers tried to be flexible (Barbara).

Eric identified the involvement of parents and bridging the school-teacher-parent gap "as one of the most important things they can do to help improve achievement." He went on to state, "We know we need the parents more involved, we know the parents are good parents; they just may not always know what's necessary for a high school and how to prepare their kids for that." According to Robert, the staff used technology, direct

mailings, and phone calls to communicate with parents. Even with the myriad methods for engaging parents, the school staff needed to account for each parents' varying needs, including working multiple jobs, lack of transportation, and limited internet access (Eric).

***Structures in place at the school.*** Robert explained that the EWIR team at Donaldson consisted of "counselors, administrators, four core teachers, and the testing coordinator." He explained that the team would often share responsibilities:

> [We] try to have them to do a quarterly field trip, something educational, and for example, my responsibility is to find a field trip that focuses on team building…. But then, we kind of collaboratively do the quarterly meetings.

Barbara added that the team met three times per week during 8th period for 45 minutes. They could coordinate their schedules because of the common planning period for all teachers (Robert).

Prior to conducting the study, the researcher assumed that all participants at all four schools had some level of familiarity with the EWIR, and almost respondents from Donaldson were, in fact, very familiar with the report. Eric, a teacher, was the only exception. Although teachers were a part of EWIR the team at Donaldson that served the core 50 students in red, Eric stated that he was not very familiar with the EWIR. He explained that outside of the administration, the school staff did not really use the report on an ongoing basis. He also noted, "The administrators see it…If we ask for copies, we could probably get them. We kind of said, 'We got a good administration team. Just tell us who the kids are.'"

***Ninth grade academy***. Robert shared that Donaldson High School's ninth grade academy only served a select group of 50 students identified as at risk on the EWIR,

because the staff believed that they could have the largest impact on those particular students. He also noted that while Donaldson had previously tried to focus on the entire ninth grade class, they ended up spreading their resources too thin and did not have the impact that they had anticipated. Robert provided the following explanation:

> Well, when you try to do that for 400 kids, it becomes overwhelming; because everybody's spread too thin. So, we don't work with students in special education, because we have a special education department…[If] they're slipping, they have a team that's able to work with them. They have their case manager, the department chair…they have a support group. So, in order for us to move our numbers, we had to get the core group of students that were not connected to anything; and if they were failing, it was just like, well, we hope the parent intervenes; if they don't, then they just fail. So, that's how we narrowed it down to 50.

Robert further noted that Donaldson did not include special education students or English language learners in the group of 50 academy participants because they already received targeted services. According to Robert,

> The staff split the students into two classes of 25 students each. The staff did not add any additional students to the cohort, even if they left the school during the year, because they did not want to change the dynamics of the group. These students took classes from the same core teachers.

During a conversation with Eric, the teacher, in the hallway, a tenth grade teacher stopped him to comment on how much further ahead her students who were formerly part of the ninth grade academy were compared to students from previous years. Barbara

explained that counselors "go into that classroom and do lessons with students [in the ninth grade academy]… [Some of what we talk about includes] time management, trying to get them prepared for college and career readiness and everything that that entails".

***Accountability***. Like the staff from the other three target schools, respondents from Donaldson indicated that there was no formal accountability structure for the staff's use of the EWIR at the school. Teachers who were part of the ninth grade academy at Donaldson volunteered for the role and did not receive any additional monetary compensation (Eric). Robert explained that by volunteering, teachers agreed to work collaboratively on lessons, teach at least two full classes of students who were at risk of retention, attend evening activities designed for the ninth grade academy, and engage parents on an ongoing basis. Because the teachers had chosen to take on these extra tasks, the administration felt there was no issue with accountability, because the team worked together to identify students and the best interventions for those students (Robert). Barbara described the level of accountability from Donaldson's principal, stating, "Our Principal requires us to be accountable for looking at the data, what we're going to do, the strategies to help bring students from the red group up to the yellow."

***Central office support.*** Robert indicated that the support that Donaldson staff received from the central office took the form of additional funding provided after the first semester of school. According to Robert, the district designated this funding for use with students identified in the at risk category of the EWIR. Eric commented that the funding resulted in a positive difference in the school's data after the school used the resources during the fourth quarter to enhance the tutoring program in the afternoon. Robert noted that part of the funding went to the teachers who helped with tutoring:

> So, if you've been doing it all year for free, and then the last quarter you're going to get paid for it, you're going to work even harder. But the teachers are really good anyway. Not that they would be doing it for the money, but it doesn't hurt.

Barbara stated that she was unaware of any additional support from the central office other than funding for tutors.

***Challenges with implementation.*** Robert noted that one challenge with implementing the EWIR was that staff restricted the courses that students in the ninth grade academy at Donaldson High School could take and did not permit them to take foreign language courses. He explained,

> If you're in the ninth grade academy, you cannot take a foreign language; because if you're struggling in English, why am I going to put you in Italian? It's a double whammy. And when the computer generates your schedule, just normal, you get a foreign language; so, we don't allow you to take a foreign language if you are in the ninth grade academy. You can take a foreign language either your tenth or eleventh grade year… And also, the foreign language teachers are very happy about it, because it's just a struggle. Because if you're having difficulty reading, you're going to have difficulty trying to learn another language. It just doesn't make sense.

According to Barbara, another challenge involved the staff's inability to provide support to more students who were "classified as red, or maybe even yellow, on the Early Warning Indicator Report." She explained, "Additional staff resources, such as teachers, would be needed if Donaldson were to consider expanding its current ninth grade academy model."

At Donaldson High School, the use of the EWIR is focused on the 50 most at risk students. Unfortunately, during the period of this study, Donaldson experienced a decrease in its ninth grade promotion rate.

**Helpfulness of EWIR**

As part of the interview, the researcher asked respondents from all schools how well the EWIR helped with addressing student achievement, ninth grade promotion rates, graduation results, and attendance rates. Fourteen school staff responded using a Likert scale, with 4 being extremely helpful, and 1 indicating that the report was not helpful at all. Table 6 summarizes their responses.

Table 6

*The helpfulness of the EWIR*

| | Extremely helpful | Helpful | Slightly helpful | Not helpful at all | Not sure |
|---|---|---|---|---|---|
| Student achievement | 8 (57%) | 6 (43%) | | | |
| Ninth grade promotion rates | 9 (64%) | 4 (29%) | 1 (7%) | | |
| Graduation rates | 6 (43%) | 1 (7%) | 3 (21%) | | 4 (29%) |
| Attendance rates | 6 (43%) | 4 (29%) | 1 (7%) | | 3 (21%) |

Scale: 4: Extremely helpful, 3: Helpful, 2: Slightly helpful, 1: Not helpful at all

The majority of respondents identified the EWIR as extremely helpful or helpful in addressing all categories. For graduation rates, 50% of respondents, stated the EWIR was slightly helpful or were not sure of the helpfulness (three – slightly helpful and four – not sure). For attendance rates, 28% (slightly helpful [n=1] and not sure [n=3]) stated that the EWIR was slightly helpful or were not sure. These responses referenced the ninth graders who started high school in SY 2014 and would graduate in SY 2018.

## Analysis

### Research Question 2

The second research question asked, "*What are the similarities in the implementation of the Early Warning Indicator Report at the two schools experiencing an increase in ninth grade promotion rates?"* The sections below provide a comparison of the approaches that the staff at Adams and Boyd High Schools employed in their use of the EWIR. The comparison will address the following categories: (1) use of the EWIR, (2) ninth grade academy, (3) accountability, (4) central office support, and (5) challenges with implementation.

**Use of the EWIR.** According to the respondents, the staff at Adams and Boyd used the EWIR to improve ninth grade promotion rates using four primary strategies: (1) identifying struggling students, (2) developing interventions, (3) encouraging parent engagement, and (4) impacting instruction (Samantha, Ronald, Jessica, Katherine, Jeffrey, Lucas, Rachel, and Bradley). Samantha, the principal at Adams High School, commented that the EWIR was more than just a report or a set of data. She explained that the solution involved making good use of the tool:

> You have to utilize the data. I mean the EWIR cannot just sit on the shelf. You have to utilize the information that is given … I think it's an awesome tool and I thank my county for providing this because normally it would take the receiving school which is the high school some time to go through the folders to capture all this data, but this data is here for us.

Jeffrey, the principal at Boyd High School, noted an additional use of the tool, "We use the EWIR to create our data wall, and our data wall is constantly moving."

***Identification***. Study participants shared that the staff at their schools used the EWIR to identify (a) students who were most at risk of not being promoted to the tenth grade and (b) students who were having challenges in one particular area (i.e., academics, behavior, or attendance). Lucas, the ninth grade academy coordinator at Boyd High School, spoke about the usefulness of the EWIR data:

> You get to see the outliers, the kids who have bad grade point averages, but have high reading standardized test scores. It gives you an overview of who you're dealing with and what kinds of instruction you might need to bring to a particular student.

Respondents indicated that staff at Adams and Boyd High Schools placed a primary focus on students in the red, high risk, category (Katherine and Jeffrey). Lucas asserted that the EWIR "does help because you know early who your kids are that should be struggling."

***Interventions***. According to study participants, staff at Adams and Boyd High Schools used the EWIR to develop interventions for at-risk students. For example, personnel at both schools employed various academic interventions designed to raise students' GPA and state test scores (Ronald, Jessica, and Bradley). To that end, they made tutoring available after school for students who needed help understanding various concepts taught in class (Samantha and Rachel).

Katherine, from Adams High School, reported using a Response to Intervention (RTI) in combination with the EWIR to provide a comprehensive approach to interventions for students. Frazelle and Nagel (2015) noted, "An early warning system used in conjunction with other dropout prevention and school improvement strategies (for

example, response-to-intervention models) will identify and support the greatest number of students at risk" (p. 15).

The two schools also used scheduling as an additional intervention. Katherine, from Adams, and Bradley, from Boyd, viewed class scheduling as an additional measure utilized to improve outcomes for students who were at risk. Administrators at both schools purposefully placed struggling students with teachers who with more experience who they considered the better teachers in the building (Samantha and Jeffrey). The schools' administration identified groups of teachers best equipped to serve these at-risk students and gave the teachers common planning periods, which provided an opportunity for them to be more involved in data analysis and incorporate the EWIR student discussion into their weekly data review (Ronald, Jeffrey, and Bradley).

The respondents at the two schools also identified nonacademic interventions that school staff employed based on their review of the EWIR. Mentoring programs were one widely used approach at both of the schools (Jessica and Rachel). Bradley, the former ninth grade administrator at Boyd, explained that through the mentoring program, "kids have an adult to relate to when they come into school; someone they can talk to." According to Samantha, some schools had a resource officer or PPW that conducted home visits during the day for students with attendance issues. During the visits, the staff person would identify reasons for absence and, occasionally, even bring students back to the schools.

According to the data, staff at the two schools utilized both instructional and non-instructional interventions to improve promotion rates for their ninth grade students. Several researchers have noted their support for this holistic approach to addressing ninth

grade promotion rates, because it allows schools to address the myriad challenges students may face (Hazel et al., 2014; Henry et al., 2012; Kemple et al., 2005; Pharris-Ciurej et al., 2012; Somers et al., 2009).

***Parent engagement.*** All respondents from Adams and Boyd indicated that their schools also used the EWIR as a tool to engage parents in their students' performance at school. Analysis of participants' feedback revealed that both schools included parents as part of the EWIR discussion when identifying interventions for their students (Samantha, Jessica, Kia, and Jeffrey). Adams and Boyd High Schools, for example, requested that parents of students identified as at-risk sign a parent contract to show their support of the interventions suggested for their student. This process is also identified within each schools' Early Warning Indicator Action Plan (see Appendix E). Staff at Adams also identified parent-partnership initiatives in conjunction with their community partners.

***Impact on instruction***. All but one of the respondents from Adams and Boyd believed that the EWIR had an impact on instruction (Jeffrey, from Boyd, was the one exception). The participants' responses indicated that the administration had embedded the EWIR into the instructional culture of the two schools. For example, Adams shared the report with all ninth grade teachers (Katherine), while Boyd shared the report with teachers across various disciplines, but limited the teachers who viewed the report to a subset of those who taught ninth graders (Lucas). The effort to share the EWIR data with multiple teachers within the schools demonstrated the staff's desire to incorporate the information from the report into practices teachers were using in the classroom.

**Ninth grade academy.** Jessica, a counselor at Adams High School, explained that the staff met with student teams at Adams met bi-weekly and held separate meetings

for students in the red and green groups. She explained the differences in the group meetings:

> Students in the green meet bi-weekly. With this group, we talk about college readiness skills and leadership skills. We [also] provide guest speakers and other information to help promote leadership and college readiness skills [in order to keep these students motivated]. Students in the yellow and red groups meet a few times per quarter. The focus is on academic preparation, goal setting…guest speakers will be motivational to encourage students to focus and work towards academic achievement. Our goal with these students is to provide them with the support they need so they can move to the green group.

Rachel, the ninth grade administrator at Boyd High School, discussed the commitment that ninth grade academy teachers had towards the students. She stated, "Our ninth grade academy was born out of the EWIR and every single teacher that sits on that committee is dedicated to improving student learning."

Researchers have suggested that grouping ninth graders together into a cohort can have a positive impact on their academic performance (Action Learning Systems, 2011; Ellerbrock 2012). Research has also shown that structures similar to ninth grade academies have had a positive impact on the promotion rates of ninth graders (Action Learning Systems, 2011; Ellerbrock, 2012; Kemple et al., 20015). Both Adams and Boyd High Schools had a ninth grade academy that included all ninth grade students (Samantha and Jeffrey). As a result, all ninth graders received some level of support, which the staff differentiated based on the specific needs of students within the green and yellow categories.

**Accountability**. As mentioned in earlier sections, there appeared to be a general sentiment among study participants at Adams and Boyd that there was no specific accountability outlined in their own performance plan regarding their use of the EWIR. While district leaders held principals accountable for acceptable ninth grade promotion rates, they did not require the principal to use the EWIR to accomplish this goal (Samantha and Jeffrey). Adams High School and Boyd High School had a ninth grade accountability plan that they had to submit to the central office in which they outlined specific interventions they would use for students identified as being at-risk (Ronald and Bradley).

The school administrators held school staff accountable for using the EWIR in much the same way. There was no direct penalty for not using the actual EWIR, but the administration evaluated staff on how they incorporated specific interventions based on the report into their instruction and how well they contributed to moving students forward to the tenth grade (Katherine, Rachel, and Bradley). The lack of formal accountability structures for using the EWIR might have caused differences in how the staff at both school used the tool.

**Central office support**. As previous sections indicated, the participants at both schools shared that they only received support from the central office on a limited, as-needed basis. The respondents from Adams and Boyd stated that the support from central office regarding the EWIR took the form of coaching (Samantha and Jeffrey). According to Samantha, "[It's] more in the form of coaching and then monitoring the ninth-grade plan, which is inclusive of EWIR." Principal supervisors and other central office staff would work with schools to help them use the EWIR report when schools placed a

specific request or when they deemed that the school was making little to no progress with increasing promotion rates (Samantha and Jeffrey).

Steven, from the central office, explained that schools received minimal guidance about how to use the report and its data because central office staff wanted to give them the autonomy to decide what would work best for their specific populations. As a result, respondents reported receiving little, if any, PD on using the tool. When asked about whether the staff at her school received PD, Katherine responded, "We really haven't, no. The bottom line is, no." Samantha and Jeffrey, who did receive some PD, reported feeling as if the activities involved more guidance or mentoring instead of instruction on using the tools.

Samantha and Jeffrey, the principals at Adams and Boyd, confirmed that they did receive some level of PD, which included an explanation of the parameters and categories of the report. According to Samantha, this explanation included instruction on the meaning of the color coding for students, a discussion of the significance of each indicator in the report, and an explanation of the algorithm used to obtain the data. With the exception of the principals, all respondents from Adams and Boyd reported that they did not receive any formal training on the EWIR. Since principals were the primary recipients of PD at Adams and Boyd, it is probable that their ability to transfer information learned to their school staff was a factor in how the school used EWIR to increase ninth grade promotion rates.

**Challenges with implementation.** Throughout the study, respondents at Adams and Boyd identified several challenges that their schools experienced with the implementation of EWIR the tool. These challenges included (a) a lack of professional

development for school staff on use of the tool, (b) too heavy a focus on one group of students, and (c) teachers' lack of access to the EWIR data.

***Professional development (PD).*** PD proved an issue because, as previously stated, only principals received any notable instruction on the use of the EWIR. Several participants from Adams and Boyd mentioned there would be a benefit in having a thorough training on best practices for all staff and teachers regarding the use of the EWIR in their schools (Ronald, Katherine, Lucas, Bradley, and Rachel). Katherine, an Adams High School teacher, and Bradley, a former ninth grade administrator at Boyd, stated that EWIR teams at their schools spent a lot of time building their own understanding of what the data in the EWIR actually meant and identifying the connections between the data and specific interventions developed in response to the data.

***Heavy focus on students in the red category.*** While the EWIR's distribution of students into categories proved useful to several of the respondents, breaking the students into these groups often led school staff members at Adams and Boyd to place too much focus on the more at-risk students in the red category while neglecting the needs of the others (Katherine, Jeffrey, and Bradley). As Bradley, from Boyd High School, stated, "When there is so much focus on students in the red category, what happens to green and yellow students over the school year"?

***Lack of access to EWIR data.*** The schools' failure to make the EWIR data available to all teachers proved another challenges to the effective implementation of the tool. Lucas, a ninth grade academy coordinator and teacher at Boyd High School, noted that the report was not available to all ninth grade teachers at his school, "[One] of the

administrators at my school has an expression. She says, ‘There's many tools. The more tools you have in your toolbox, the better teacher you can be; and this could be a very effective tool.’" Jeffrey commented that Boyd High School limited access to the tool because “teachers already have a lot of data to review and understand.”

Adams High School and Boyd High School demonstrated several similarities in how they used the EWIR, as identified by study participants. It is probable that these similarities impacted their increase in ninth grade promotion rates.

**Research Question 3**

Research Question 3 asked, “*What are the similarities in the implementation of the Early Warning Indicator Report at the two schools experiencing a decrease in ninth grade promotion rates*?” The sections that follow present a comparison of how the staff at Cooper and Donaldson High Schools implemented the EWIR report. This comparison will address the following categories: (1) use of the EWIR, (2) structures in place, (3) ninth grade academy, (4) accountability, (5) central office support, and (6) challenges with implementation.

**Use of the EWIR.** According to respondents, staff at Cooper and Donaldson High Schools used the EWIR to identify areas of need related to academics, attendance, and behavior. Their use of the EWIR fell into three primary categories: (1) developing interventions, (2) encouraging parent engagement, and (3) impacting instruction.

***Interventions***. At both Cooper and Donaldson, the ninth grade teams developed interventions to support students identified as at risk by the EWIR. At both high schools, these interventions took the form of tutoring and mentorship programs. Both schools recruited mentors from outside of their schools—Cooper from an outside community

organization (Nancy), and Donaldson from an area college (Robert). Sean, the principal at Cooper High School, and Robert, the ninth grade administrator Donaldson High School, both shared their beliefs that mentors positively impacted struggling ninth grade students, but they were unable to draw a direct correlation between mentoring and any increase in promotion rates.

***Parent engagement***. According to the participants, staff at Cooper and Donaldson High Schools did not share EWIR data with parents, but they did attempt to engage the parents of students in the at-risk category in efforts to improve their students' outcomes (Nancy, Cindy, and Robert). Staff at Cooper partnered with community organizations to provide parents with strategies and guidance on how best to support their students, while Donaldson staff engaged with parents more directly through quarterly parent meetings and additional designated parent-teacher conference options (Nancy and Eric).

***Impact on instruction***. The majority of participants from Cooper and Donaldson believed that the EWIR influenced instruction because it provided an opportunity for teachers to analyze multiple student data inputs and use this data to differentiate instruction. One respondent, Nancy, counselor at Cooper High School, disagreed because she viewed the EWIR as "Just informing teachers that this is an at-risk student." Although most of the staff at the two schools noted that the EWIR affected instruction, Eric commented that the staff at Donaldson seemed to rely more on classroom data to inform instruction. According to the Eric, staff used formative and summative assessments (e.g., classroom exit slips, observations, homework, quizzes, and tests) than they did the report.

**Structures in place.** According to respondents, neither Cooper nor Donaldson had a formal structure in place that guided the sharing of responsibilities among members of the EWIR team (Cindy and Barbara). At both schools, the EWIR teams included administrators, counselors, and teachers. The principal was the champion for using the EWIR within Cooper High School and Donaldson High School. Nancy explained that the principal facilitated the discussions and ensured that the strategies identified by the EWIR team were "implementable." The potential impact of the lack of structure in both schools is discussed in more detail in *Step 1* of *Viewing EWIR Implementation Through the Therriault EWS Framework*.

**Ninth grade academy.** Respondents from Cooper and Donaldson both explained that their ninth grade academies included a limited number of students. Robert, from Donaldson, noted that the school staff tended to place the majority of its focus on a select group of 50 students identified as at-risk in the EWIR, because they felt they could have the largest impact on that population of students. Robert explained that the staff had tried previously to focus on the entire ninth grade, but they spread their resources too thin, and the EWIR did not have the impact that the staff wanted it to have:.

> Well, when you try to do that for 400 kids, it becomes overwhelming, because everybody's spread too thin. So, we don't work with students in special education, because we have a special education department…that if they're slipping, they have a team that's able to work with them, they have their case manager, the department chair, they have a support group. So, in order for us to move our numbers, we had to get the core group of students that were not connected to anything; and if they were falling, it was just like, well, we hope the

parent intervenes. If they don't, then they just fail. So, that's how we narrowed it down to 50.

At Cooper, the limitation in the number of students was due the size of the school staff and competing programs targeting ninth graders (Nancy). Both schools with decreases in ninth grade promotion rates restricted the number of ninth grade students who received additional support. Although it is inconclusive, it is probable that this limitation impacted the promotion rates at Cooper High School and Donaldson High School.

**Accountability.** Field observations and interview data revealed that the staff at Cooper and Donaldson employed self-accountability when using the EWIR, because they really wanted to help students improve academically. The staff felt a sense of responsibility that motivated them to follow through with their extra responsibilities related to the EWIR (Nancy and Eric). Barbara, counselor at Donaldson, summed up the sentiment across both schools regarding the accountability associated with using the EWIR.

> Our principal requires us to be accountable for looking at the data, what we're gonna do, the strategies to help bring students from the red group up to the yellow. Even looking at students in the yellow group…'Cause sometimes students in the yellow group could move to red, so there is an accountability from our principal and from the district. That's why, at the end of the year, we always have to report what strategies and what was done in order to improve ninth grade promotion.

The absence of a formal accountability structure for use of the EWIR highlights the lack of expectations regarding how the tool at Cooper and Donaldson High Schools. Reeves (1998) explained the value of accountability systems for principals and teachers in establishing expectations and identifying relevance. He went on to state the following:

> Principals and teachers need accountability goals that are directly related to their individual schools. Test scores are related to effects. Meaningful accountability systems have goals that are relevant to causes. In the Milwaukee Public Schools, for example, a nationally recognized effort was undertaken to improve math performance by students. Schools were not only recognized for the achievement of high math scores, they were also recognized for achieving the antecedents of excellence—improving calculator proficiency, establishing "math buddies" programs, increasing parent tutor training, and a host of other accountability indicators—that were directly relevant to the needs of the schools and the overall goal of improved math scores. (Reeves, 1998, p. 2)

Without structured accountability, there is a barrier to identifying whether the staff at Cooper and Donaldson used the EWIR in the most productive way. This lack of structure may have contributed to both schools' decrease in ninth grade promotion rates.

**Central office support.** As discussed in previous sections, respondents from Cooper and Donaldson indicated that staff at their schools received support from central office on an *ad hoc* basis (Nancy and Sean). Although Steven, from the central office, stated that some structure should be in place for reviews of the EWIR, schools had the autonomy to implement the interventions they thought would be most effective for their students, and had the flexibility to assign the EWIR team for the schools.

Respondents from both Cooper and Donaldson referenced the fact that the central office only offered PD on the EWIR to the principals. Other school staff did not receive formalized professional development. The Southern Poverty Law Center explained that investing in the improvement of teachers' knowledge produces good teacher practice, which, in turn, establishes a good foundation for the school (Teaching Tolerance, 2015).

Both Cooper and Donaldson received funding support from the central office to develop interventions for students identified as being at-risk. Steven, a representative from the central office, explained how the district provided funding to support schools:

> We polled the principals regarding needs for improving their ninth grade promotion rates. Schools were asked to provide justification. Some needed money for [after school] assignments and some needed transportation. Others needed other items in support of their ninth grade academies. [The central office] decided which schools get which funding [and how much would be allocated based on need].

**Challenges with implementation.** Respondents from Cooper and Donaldson identified a few reasons for the ineffective implementation of the EWIR at their schools. These reasons included (a) restricting courses students could take, (b) including only core teachers as part of the discussion about students identified as at-risk students on the EWIR, and (c) limiting the number of students included in the ninth grade academy.

At Donaldson, Robert noted that the ninth grade academy structure did not provide much flexibility with scheduling for students identified as at-risk on the EWIR. Because the school staff wanted students to focus more on the core courses, they were unable to take certain elective courses including foreign languages (Robert).

Nancy noted that Cooper High School also limited the number of teachers who had access to the EWIR. Cindy, an administrator at Cooper, shared that only ninth grade academy teachers reviewed the EWIR data. By restricting the number of teachers who took part in the discussion about the EWIR data, it is probable that the staff at both schools missed an opportunity to use this data to impact instruction for ninth students.

The data from Cooper and Donaldson High Schools revealed similarities in (a) the way both schools used the EWIR, (b) the structures each school put in place to support the staff's use of the EWIR, (c) the staff's approach to their ninth grade academies, (d) the lack of accountability, and (e) the level of central office support they received. These similarities may have led to the decrease both schools experienced in ninth grade promotion rates.

**Research Question 4**

Research Question 4 asked, "*How are the personnel in schools that have seen increases in ninth grade promotion rates using the Early Warning Indicator Report differently than are those in the schools experiencing decreases in promotion rates*?" The data collected throughout this study revealed several factors that may have contributed to the varying impact that use of the EWIR had on ninth grade promotion rates at the four target schools. This section includes a comparison of the schools' approach to (a) ninth grade academies, (b) staff involvement in the analysis of EWIR data, and (c) principal tenure.

**Ninth grade academy.** Adams and Boyd High Schools, both of whom experienced increases in ninth grade promotion rates, exhibited similarities in the structure of their ninth grade academies. Staff at both schools included all ninth graders

in the academy. In contrast, the two schools with decreasing promotion rates, Cooper and Donaldson High Schools, both limited the number of students who could participate in the ninth grade academy. Donaldson limited their academy to 50 of the most at-risk students within the red category. Bruce et al. (2011) did not encourage the practice of limiting support to a smaller, higher-needs population of students, although schools faced with personnel capacity challenges usually select it. According to Bruce et al., "Students who are just at the indicator threshold or are moving in that direction are those who can most likely be put back on track to graduation with existing school personnel" (p. 38).

**Staff involvement in the analysis of EWIR data.** Research suggests that the way that school staff used the EWIR data may have contributed to teacher bias, based on the categorization of students, and might have resulted in lowered expectations for students categorized as "at-risk." According to Baron, Tom, and Cooper (1985), "The race or class of a particular student may cue the teacher to apply the generalized expectations, therefore making it difficult for the teacher to develop specific expectations tailored to individual students" (p. 251). Ferguson (2003) concluded that perceptions of the intellectual potential of students had an effect on the goals set by teachers and parents. Adults who underestimate a student's potential will most likely set low goals for that student. Ferguson (2003) also noted that perceptions are just one factor that influences goals, and others include curriculum and student behaviors. As such, grouping and identifying students as "at-risk" in the red category might have created a teacher bias towards those students that could have had a negative effect on the students' ability to move out of the red category and ultimately advance to the tenth grade.

At Adams and Boyd High Schools—the schools that saw an increase in ninth grade promotion rates—more teachers were actively involved on the EWIR team and participated in the discussions and analysis of the report. Staff at Adams, and all but one participant at Boyd, stated that the EWIR impacted instruction and was embedded into the culture of the school. It is probable that the integration of the tool into the fabric of school operations, along with the level of involvement of teachers on the EWIR team, made a difference in the impact that the report had on ninth grade promotion rates. The schools that saw a decrease in ninth grade promotion rates—Cooper High School and Donaldson High School—limited the number of teachers who accessed the EWIR. It is likely that teachers' limited access to the data influenced the decrease in ninth grade promotion rates at these schools.

**Principal tenure.** The data from the interviews also revealed that the principals at the schools with decreases in ninth grade promotion rates—Cooper and Donaldson—had a combined tenure at their schools of over 15 years. The principals at the schools that saw increases had less than 10 years of combined tenure. The tenure of a principal may lead to a different way of embracing the EWIR. Principals with less tenure may have been more willing to accept a new approach to solving the challenge of improving ninth grade promotion rates.

## Viewing EWIR Implementation Through the Therriault Early Warning Intervention Monitoring System Framework

The *Early Warning Intervention Monitoring System (EWIMS)* developed by Therriault et al. (2013) was the theoretical framework used for evaluating the implementation of the EWIR in Wyatt School District. The EWIMS framework supports

schools and districts as they implement early warning systems that monitor high school students at risk of not graduating. Therriault et al. referred to the framework as the EWIMS, while Wyatt School District titled its tool the Early Warning Indicator Report (EWIR). The sections below provide an evaluation of the EWIR based on the seven-step process developed by Therriault et al.

**Step 1: Establish roles and responsibilities**. Therriault et al. (2013) recommended that schools identify a team of staff members who comprehend their roles on the team, understand the students, and have received training on the early warning system. Additionally, there should be an established meeting routine, and at least one person should be responsible for importing the data in to the tool (Therriault et al., 2013).

When discussing the roles and responsibilities of staff who analyzed the EWIR in the present study, all participants confirmed that there was an established team at their school responsible for reviewing the data and identifying interventions for students. Cooper High School and Donaldson High School, both with a decrease in promotion rates, reported not having defined responsibilities for team members. All teams met regularly to review the EWIR, and the ninth grade administrator at each school was the main person responsible for the use of the tool at the school. The ninth grade administrator also provided the report to team members. Since the time of this study, the report had become a part of the district's data warehouse, and data updated in real time with each view. The data collected indicated that none of the four target schools provided staff with formal training for the EWIR.

**Step 2: Use an early warning system tool**. The EWIMS framework indicates that all team members working with the tool should understand the basic features,

background information, and reporting requirements associated with the tool (Therriault et al., 2013). Additionally, the central office school technology specialist should regularly update the data in the tool (Therriault et al., 2013).

All but one of the participants—Rachel, the ninth grade administrator at Boyd High School—reported having a clear understanding of the EWIR tool. Rachel stated that she was "familiar with the EWIR," but during the first part of the interview, she seemed very confused about what the data were actually saying. However, by the end of the interview, she seemed to have more clarity about the resource. The school district took responsibility for ensuring that the data in the EWIR was up-to-date and populated on a regular basis.

**Step 3: Review the early warning system data**. Therriault et al. (2013) stated that all early warning systems should identify students who are at risk of retention. Wyatt School District accomplished this goal by using the red, yellow, and green identification system. The EWIR identified students who were at-risk by placing them in the red category. Therriault et al.'s framework also suggests that the team reviewing the early warning system should be able to identify patterns across groups of students to "begin to consider the allocation of student support or dropout-prevention resources to flagged students" (Therriault et al., 2013, p. 14). The participants from Wyatt School District provided no specific information that addressed this issue.

In preparation for the next step, Therriault et al. (2013) suggested that teams identify any additional data that they needed to review in conjunction with the early warning system data, and assign the task to specific team members. Only Katherine, a teacher at Adams High School mentioned that the staff at her school engaged in this step

of the framework. She explained, "[Teachers] are tasked with identifying additional classroom data for EWIR review team meetings." No other respondents mentioned this step as a component of their data review.

**Step 4: Interpret the early warning system data.** Therriault et al. (2013) suggested that during meetings, teams should gain a deeper understanding of the EWIR report so they can address why the system is identifying students as at-risk. None of the respondents identified this step as a practice in place at any of the schools.

**Step 5: Assign and provide interventions**. The framework identifies the need for each school to have a list of interventions that are available for students, which also includes the most common interventions in the school (Therriault et al., 2013). Additionally, there should be documentation of each student's assigned interventions based on their specific need.

According to the data, all schools in Wyatt School District had to submit a ninth grade action plan, which had to include common interventions that the school planned to implement based on student needs. A review of district documents revealed that Boyd listed each student identified as at-risk and their assigned intervention as part of their action plan. The other schools did not list them in their action plans.

**Step 6: Monitor students' interventions**. Therriault et al. (2013) suggested that schools should evaluate students' progress based on the specific interventions that their schools employed. The schools should have a process in place that allows for the continual evaluation of the interventions and the identification of any gaps in the school's intervention strategy.

Based on information gathered during this study, participating schools incorporated this step on an informal basis. Each school's ultimate goal was to eliminate the number of students considered at risk.

**Step 7: Evaluate and refine the early warning system process.** To refine the use of early warning systems, Therriault et al. (2013) recommended that at the conclusion of a school year, school teams should (a) evaluate and identify what worked and what did not work in their use of the EWIR throughout the school year and (b) make recommendations about potential improvements. The researchers also suggested that teams determine whether interventions affected student outcomes and identify the individuals that will serve on the team the following school year, so they can begin preparing for their role.

The data collected during the present study indicated that staff at all four schools began reviewing data and gaining a better understanding of incoming ninth graders well before the beginning of each school year. This finding indicates that at least part of the EWIR review team was in place prior to the end of the prior school year. The guidance provided by the Therriault Framework identifies best practices that serve as a guide for Wyatt's EWIR implementation.

**Recommendations**

The findings and analysis of this study led the researcher to three recommendations for districts trying to improve their use of early warning data systems with the goal of enhancing ninth grade promotion rates. The recommendations include (1) providing additional support to schools, (2) increasing accountability for users of the EWIR, and (3) hiring additional district-level staff to support EWIR implementation.

**Recommendation 1: Providing additional support to schools**. Data revealed the importance of ensuring that school staff fully understands how to use the EWIR effectively. All of the participants in this study expressed a need for PD on how to (a) use the EWIR within their schools and (b) identify interventions for students based on the needs identified by the EWIR. All responding teachers reported that they had not received any PD, and all administrators stated that they had received only limited support from the central office.

Instead of waiting for principals to request support, the central office should be more proactive and have a more systematic way of identifying the needs of the schools. Otherwise, principals and building staff may not reach out to district representatives until a significant amount of the school year has passed. The central office should have a person specifically designated to provide support and conduct a needs assessment to identify any areas of concern among school staff. The designated person should then find resources to support these areas of concern and prepare a schedule with times and dates that they will offer support or PD. Through this resource, teachers, administrators, and other school staff could gain additional insight into the use of the tool and learn how to incorporate it into their work at the school.

Balfanz (2009) stressed that offering teachers PD on early warning systems could help them develop a comprehensive approach to improving ninth grade promotion rates and addressing student dropouts. Frazelle and Nagel (2015) suggested, "Professional development can also help generate excitement around using the early warning system, shifting views from the system as 'yet another task' to complete" (p. 4).

Additionally, the district should require that a representative from the central office attend each EWIR team meeting for every school. This person could provide support and monitor staff's use of the resource. The district previously attempted to implement this policy with the central office liaisons, but there was little follow through by the district and the central office liaisons. Ideally, the central office staff persons who participate in these school meetings would also meet regularly, with each other, to share best practices and identify areas of improvement district-wide. Therriault et al. (2013) recommended using a combination of district personnel and school staff for EWIR implementation in schools. By employing this recommendation, schools would receive additional support, and the central office would gain a better understanding of what is happening at the school level and adjust the support they provide as needed.

**Recommendation 2: Increasing accountability for users of the EWIR**. Respondents indicated that the district enforced very limited accountability for users of the EWIR. While the district did hold schools accountable for increasing ninth grade promotion rates, there were no measures in place to hold school administrators or principals accountable for actually using the EWIR tool. The result, as indicated in the data, was varied implementation, with some schools utilizing the tool more effectively than did others. Balfanz (2009) asserted that accountability measures should include monitoring and evaluating how interventions impact students. Balfanz's suggestion aligns directly with Steps 6 and 7 in the Therriault et al. (2013) framework, which involve monitoring student interventions and evaluating the impact of the employed strategies.

District leaders developed the concept of the EWIR to identify at-risk ninth grade students (internal district document, September 2015). According to Eddie, a central

office staff person, the district "invested a lot of resources, monetary and time, to provide a robust and useful tool for schools to use to improve ninth grade promotion rates and identify students at-risk of not being promoted to tenth grade." Given this investment, the central office should identify consequences for schools that do not use the tool.

At the time of this study, the district had not assigned enough people from the central office to support the schools' use of the EWIR. Monitoring the use of the tool was one of many duties for a few people in the district. According to Steven, another central office staff person, this oversight was also a part of the principal supervisors' duties, in additional to many other responsibilities, and they did not have the capacity to monitor the use of the tool with fidelity. Moving forward, the central office should have their liaisons support and monitor the use of the EWIR and hold schools accountable for their employing the tool.

**Recommendation 3: Hiring additional district-level staff to support EWIR implementation.** As noted above, if the district is serious about using the EWIR to improve ninth grade promotion rates, additional oversight and support is necessary from the central office to ensure quality implementation. At the time of the study, several different individuals had some level of responsibility for the oversight of the EWIR, and, as Steven noted, managing the implementation of the EWIR was "not somebody's job." Hiring a dedicated staff person to oversee the implementation could help district leaders ensure the fidelity of implementation at each school. This individual would also provide central office liaisons with guidance and support for their duties, lead district-wide improvements on the tool, and spearhead PD efforts. Additionally, this person would

identify and map correlating interventions and evaluate the effectiveness of selected strategies.

Wyatt School District leaders also should consider hiring data coaches to assist schools with the analysis and interpretation of EWIR data. Frazelle and Nagel (2015) identified the data coach as a common position that is a critical part of an early warning system team. The authors suggested that the responsibilities of the data coach include "[teaching] the team how to interpret the data [and identifying] appropriate professional development" (Frazelle & Nagel, 2015, p.3).

Across the country, various districts and state departments of education have hired data coaches to support the implementation of their early warning systems. In Alabama, the State Department of Education developed an early warning system, the Alabama Graduation Tracking System, which they provided to schools at no cost. For the schools identified as high needs, the state hired 25 data coaches, and early warning system data coaching was part of their responsibilities (Bruce et al., 2011).

Metropolitan Nashville Public Schools also hired a district coordinator and 12 data coaches to serve high schools across the district (Bruce et al., 2011).

> The data coaches are charged to build a culture among teachers and counselors for understanding student-, classroom-, and school-level EWS [Early Warning System] data, and using it to guide intervention efforts. They also augment a sizable corps of instructional coaches and reflect a district-wide investment to build human capital through professional development and coaching. (Bruce et al., 2011, p. 28)

According to Therriault et al. (2013), "The role of the district is to identify system-wide concerns and to develop and recommend districtwide changes that address those concerns" (p. 8). Identifying a comprehensive EWIR team within the central office would facilitate the comprehensive implementation and increased use of the EWIR in schools, which, in turn, may lead to improved ninth grade promotion rates across the district.

**District Impact**

Wyatt School District has invested many resources into developing a powerful tool designed to help schools improve ninth grade promotion rates. The district has seen improvements, but over half of the district's high schools have yet to achieve the district's goal of increasing promotion rates by 3-5% each year. The schools have the data, but data alone does not create an opportunity to improve student promotion rates. By implementing the recommendations outlined in this study, schools will have an increased understanding of the tool and of appropriate interventions for students at risk of retention. Ideally, this understanding will translate into further increases in ninth grade promotion rates.

**Future Research**

This research provided new insight into how four schools in Wyatt School District used the EWIR to improve ninth grade promotion rates across the district using a cross-case analysis of how staff at the target schools was using the tool. Educators are just beginning to understand how to integrate the EWIR into the daily operations of their schools, and additional research is necessary to identify the optimal ways to use the tool.

Future research first should focus on evaluating the PD opportunities offered by the central office. Data on the type of PD school districts offer and the role those

trainings have on ninth grade promotion rates would provide insight into how districts should deliver PD going forward.

There should also be an in-depth evaluation of the EWIR team structures and responsibilities. This assessment would help district leaders identify the benefits associated with a school's specific structure for reviewing the data and identifying interventions.

An exploration of the levels of principal involvement with the EWIR could also prove useful. This inquiry should explore (a) whether principals who spend more time with the tool and the EWIR team have more success in their schools and (b) what the principal does with the team that proves most beneficial.

Additionally, researchers should examine the report itself to determine whether (a) the algorithm accurately predicts student outcomes, (b) there should be additional categories included as part of the analysis, and (c) the EWIR provides the right information schools need to intervene appropriately. Additional inquiry should involve the identification of other factors that contribute to improving ninth grade promotion rates. This research would help to isolate and identify the actual impact of the EWIR

**Conclusion**

Across the country, schools face a consistent challenge, as high rates of students fail to transition from the ninth to the tenth grade. By putting a system in place to identify at-risk students, schools have an opportunity to intervene in these students' lives and alter their academic trajectory. Wyatt School District has attempted to address their consistently low ninth grade promotion rates by employing the Early Warning Indicator. Since the implementation of this tool, the district has seen some improvements in the

percentage of students who transition from ninth to tenth grade of 8.4% from SY 2011 to SY 2013; however, there is still an opportunity to make additional progress (MASDE, 2014). According to Frazell and Nagel (2015), districts and schools reporting the most progress with their early warning systems (EWS):

- focus attention on system-level implementation,
- support EWS across all levels of leadership,
- provide professional development to all users,
- plan roles of all team members,
- incorporate tool as part of overall framework to improve decision making, and
- expand data analysis to cover other grade levels.

Across the country, 85% of students who are not promoted from ninth to tenth grade on time will drop out of high school ("High School Dropout Statistics," 2014). It is the responsibility of schools and districts to change this statistic by making every effort to provide the support students need to be successful. Early warning systems are a key resource in helping educators to achieve this goal.

This system might have made the difference in the life of 43-year-old Nichole, if it had been available when she was in high school. Nichole approached me while I was in the data analysis phase of this study. She asked for my assistance with completing a basic job application, because she was not able to read the application, and she could not write very well. As I helped Nichole complete her application, I learned that she never graduated from high school and barely completed the eighth grade. If an early identification system was available when Nichole was in high school, there might have been an opportunity to provide additional support for her and possibly change Nichole's

outcome in life. Wyatt and other school districts across the country have the opportunity to make a difference in the life of students whose path may be similar to Nichole's without the proper intervention.

Study participants from Wyatt School District strongly believed that the EWIR tool aided in improving ninth grade promotion rates. While the users were familiar with the tool, only principals received professional development as to the best way to use the data in the EWIR. The goal for central office should be to provide training opportunities to all users, including assistant principals, counselors, teachers, and other school staff.

The results of this study suggest that increasing the accountability expectation for principals and others for the use of the EWIR and hiring district staff to provide direct support around EWIR implementation might positively impact how staff uses the tool within schools. Improved use of the EWIR, in conjunction with an overall strategy to improve ninth grade promotion rates, is likely to have a positive impact on the number of students who are promoted from ninth to tenth grade on time.

## Appendices

### Appendix A: Interview Protocol (Principal)

1. What do you have in place to assist you with implementing EWIR at your school? PROBE - If "Team" is not part of the answer, Ask – IS there an EWIR team in place at your school?
2. Who is part of the EWIR team?
3. How frequently does the team meet? PROBE-For how long?
4. Please describe your role on the team?
5. Who constructs the agendas for the meetings? PROBE-Are minutes kept for the meetings?
6. How long has your school been using the EWIR?
7. What are the responsibilities of other team members?
8. How are goals set for use of the EWIR?
9. What are the primary objectives of using the EWIR?
10. To whom and how are the results from the EWIR reported?
11. What student benchmarks, if any, are in place for the EWIR?
12. What interventions, if any, are triggered by the EWIR?
13. How, if at all, is the EWIR utilized to influence instruction?
14. What students are prioritized for discussion and analysis?
15. When making conclusions about the EWIR data, are there any specific requirements?
16. On a scale of 1-4, where 4 is extremely helpful and 1 is not helpful at all, how helpful do you believe the EWIR is in improving
    a. student achievement?
    b. $9^{th}$ grade promotion rates?
    c. graduation rates?
    d. attendance rates?
17. What is the process for reviewing data in the EWIR?
18. Are additional sources of student data used when reviewing the report? PROBE: If yes, explain.
19. How are the actions, developed based on analysis of the EWIR, communicated to other school personnel?
20. Are there actions assigned to students that are communicated to people outside of the school?
21. How, if at all, are various school personnel held accountable for adhering to the recommendations developed as a result of the EWIR review?
22. Do you receive any assistance from central office on utilizing the EWIR? PROBE-If yes, What?
23. What measures, if any, are used to evaluate the usefulness of the EWIR?
24. What, if anything, do you find most beneficial about the tool?
25. What, if anything, would make the EWIR more helpful?
26. Do you have anything else you would like to add that I have not asked?

## Appendix B: Interview Protocol (School Staff)

1. Are you familiar with the EWIR?
2. What do you have in place to assist you with implementing EWIR at your school? PROBE - If "Team" is not part of the answer, Ask – IS there an EWIR team in place at your school? Who is a part of the EWIR team?
3. How frequently does the team meet? PROBE-For how long?
4. Please describe your role on the team?
5. What is the role of the principal with the EWIR implementation?
6. Who constructs the agendas for the meetings? PROBE-Are minutes kept for the meetings?
7. What are the responsibilities of other team members?
8. How are goals set for use of the EWIR?
9. To whom and how are the results from the EWIR reported?
10. What student benchmarks, if any, are in place for the EWIR?
11. What interventions, if any, are triggered by the EWIR?
12. How, if at all, is the EWIR utilized to influence instruction?
13. What students are prioritized for discussion and analysis?
14. When making conclusions about the EWIR data, are there any specific requirements?
15. Who constructs the agendas for the meetings? PROBE-Are minutes kept for the meetings?
16. On a scale of 1-4, where 4 is extremely helpful and 1 is not helpful at all, how helpful do you believe the EWIR is in improving
    a. student achievement?
    b. $9^{th}$ grade promotion rates?
    c. graduation rates?
    d. attendance rates?
17. What is the process for reviewing data in the EWIR?
18. Are additional sources of student data used when reviewing the report? PROBE: If yes, explain.
19. How are the actions, developed based on analysis of the EWIR, communicated to other school personnel?
20. Are there actions assigned to students that are communicated to people outside of the school?
21. How, if at all, are various school personnel held accountable for adhering to the recommendations developed as a result of the EWIR review?
22. Have you received professional development on use of the EWIR? PROBE-If so, please describe.
23. What professional development offerings would you like to receive?
24. What, if anything, do you find most beneficial about the tool?
25. What, if anything, would make the EWIR more helpful?
26. Do you have anything else you would like to add that I have not asked?

## Appendix C: Interview Protocol (Central Office)

1. Please describe your role in the district.
2. How long have schools been using the EWIR?
3. Do you have a role in the EWIR implementation? PROBE-If so, please describe.
4. Do you use the EWIR data?
5. Please describe any protocol in place for schools' use of the EWIR?
6. What level of accountability, if any, is in place for schools' use of EWIR? PROBE-Please describe.
7. To whom are EWIR results reported?
8. Please describe any interaction, if any, you have with schools and their use of EWIR.
9. Are there any changes underway or planned for the district's implementation of EWIR?
10. Please describe any professional development offered on the EWIR.
11. Are there any goals in place for the school's use of the EWIR?
12. Please describe examples of the most effective use of the EWIR you have observed.
13. What, if anything, do you find most beneficial about the tool?
14. What, if anything, would make the EWIR more helpful?
15. Do you have anything else you would like to add that I have not asked?

**Appendix D: Interview Questions Mapped to Therriault et al. Anticipated Outcomes**

| Process step | Anticipated Outcomes | Interview Questions |
|---|---|---|
| Step 1 – Establish roles and responsibilities | 1. Establishment of an EWIMS team composed of staff who have a diverse knowledge of students in the school, who understand their roles, and who are trained in the use of the tool and the EWIMS process<br>2. Establishment of meeting routines and common agendas<br>3. Identification of one or more individuals responsible for routinely importing or entering data into the tool | - Who is part of the EWIR team?<br>- How frequently does the team meet?<br>- Please describe your role on the team?<br>- What is the role of the principal with the EWIR implementation?<br>- What are the responsibilities of other team members?<br>- Who constructs the agendas for the meetings?<br>- Do you receive any assistance from central office on utilizing the EWIR?<br>- Are you familiar with the EWIR?<br>- Please describe your role in the district.<br>- Do you have a role in the EWIR implementation? |
| Step 2 – Use the Early Warning System (EWS) High School Tool | 1. Understanding of the basic features of the EWS High School Tool and EWS reports by all team members<br>2. Designated district or school technology specialist or specialists who are responsible for loading the tool with student data in a regular and timely manner<br>3. Fully populated tool with up-to-date information that is based on regular import or entry according to the established schedule | - What do you have in place to assist you with implementing EWIR at your school?<br>- How long has your school been using the EWIR?<br>- How are goals set for use of the EWIR?<br>- Have you received professional development on use of the EWIR?<br>- What professional development offerings would you like to receive?<br>- How long have schools been using the EWIR?<br>- Do you use the EWIR data?<br>- Please describe any protocol in place for schools' use of the EWIR?<br>- Please describe any interaction, if any, you have with |

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| | | schools and their use of EWIR.<br>- Please describe any professional development offered on the EWIR.<br>- Are there any goals in place for the school's use of the EWIR?<br>- Please describe examples of the most effective use of the EWIR you have observed. |
| Step 3 – Review the EWS data | 1. Identification of individual students who show signs of risk for dropping out of high school<br>2. Understanding of patterns across groups of students and over time that allow the EWIMS team to begin to consider the allocation of student support or dropout-prevention resources to flagged students<br>3. *In preparation for Step 4*: Identification of the type of additional information that will be needed to better understand possible underlying reasons specific students were flagged for particular indicators<br>4. *In preparation for Step 4*: Assignment of responsibilities for gathering the additional information and data on specific students and student characteristics | - What are the primary objectives of using the EWIR?<br>- To whom and how are the results from the EWIR reported?<br>- Are additional sources of student data used when reviewing the report? |
| Step 4 - Interpret the EWS data | 1. Better understanding of reasons that individual students, and groups of students, are flagged as being at risk<br>2. Identification of individual and common needs among groups of students | - What student benchmarks, if any, are in place for the EWIR?<br>- What students are prioritized for discussion and analysis?<br>- When making conclusions about the EWIR data, are |

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|---|---|---|
| | | there any specific requirements? |
| Step 5 – Assign and provide interventions | 1. Compiled inventory of supports and interventions available to students in the school<br>2. Assignment of flagged students to supports and interventions on the basis of student needs identified in Steps 3 and 4 (documented for each individual student in the EWS High School Tool)<br>3. Identification of gaps in the available supports and interventions<br>4. Recommendations for schoolwide support strategies aimed at addressing the most common student needs identified in Steps 3 and 4 | - What interventions, if any, are triggered by the EWIR?<br>- How, if at all, is the EWIR utilized to influence instruction?<br>- What is the process for reviewing data in the EWIR?<br>- How are the actions, developed based on analysis of the EWIR, communicated to other school personnel? |
| Step 6 – Monitor students interventions | 1. Knowledge about individual student progress and specific responses to assigned interventions, which allows the EWIMS team to make decisions about continuing, reassigning, or terminating interventions for flagged students<br>2. Identification of gaps in the available supports and interventions for students, recommendations for new intervention strategies, and prioritization of new interventions that are based on EWS data<br>3. Knowledge about the general effectiveness of interventions, based on data from monitoring students participating in each program | - On a scale of 1-4, where 4 is extremely helpful and 1 is not helpful at all, how helpful do you believe the EWIR is in improving<br>o student achievement?<br>o 9th grade promotion rates?<br>o graduation rates?<br>o attendance rates?<br>- Are there actions assigned to students that are communicated to people outside of the school?<br>- How, if at all, are various school personnel held accountable for adhering to the recommendations developed as a result of the EWIR review? |

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| | 4. Information sharing with appropriate stakeholders about student needs, the impact of existing interventions, and the need for additional interventions, if applicable | |
| Step 7 – Evaluate and refine the EWS process | 1. Shared understanding of the EWIMS process implementation strengths and challenges<br>2. Clear recommendations for improving the EWIMS process<br>3. Established EWIMS team for the following school year, composed of members with a clear understanding of the process and of their roles<br>4. Validated indicators that substantiate the EWS data in the school and district | - What measures, if any, are used to evaluate the usefulness of the EWIR?<br>- What, if anything, do you find most beneficial about the tool?<br>- What, if anything, would make the EWIR more helpful?<br>- What level of accountability, if any, is in place for schools' use of EWIR?<br>- To whom are EWIR results reported?<br>- Are there any changes underway or planned for the district's implementation of EWIR? |

## Appendix E: Early Warning Indicator Action Plan (9th Grade)

| School Name: |
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| 1. List the members of the Early Warning Team who will focus on the EWIR [Structures] |
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| Names | Title |
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| Names | Title |
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| 2. What are the specific expectations and responsibilities for each team member? How often will this team meet to discuss the process of improving student achievement? [Structures] |
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| 3. How will your school provide time for the Early Warning Team to conduct root cause analyses to identify the underlying problems of at-risk students during the month of October? [Structures/Systems] |
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| 4. What schoolwide interventions/strategies were used with your 9th grade students last year? Which were successful? Are there any other schoolwide intervention(s) that the Early Warning Team should consider adding this year? [Resources] |
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| 5. How can external partners be included in the process of supporting your at-risk students? [Stakeholders] |
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| 6. Which team members will identify the need(s) of each REPEATING student to help meet the requirements for promotion? [Systems] |
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| 7. When EWIR quarterly updates are received, how will the Early Warning Team examine the progress of their at-risk and repeating students in order to make adjustments to improve their performance? [Structures/Systems] |
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| Part B. Ninth Grade Plan | | | | |
|---|---|---|---|---|
| **Interventions** (List of School Interventions) | **Communication Plan/Tasks** (What do you need to do to achieve your objectives including communication of the plan?) | **Monitoring Criteria** (How will you monitor progress, identify challenges and barriers of implementation?) | **Timeframe** (What is the implementation timeframe?) | **Resources** (What resources are needed?) |
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## Appendix F: Early Warning Indicator Report – Quarterly Update

| Last Name | First Name | Current Risk Level | Promotion Probability | Current GPA | Attend Rate | – | Initial Risk Level | Initial Promotion Prob | g8_GPA | g8 Attend Rate | Math Prof | Read Prof |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Last | First | Yellow | 85% | 1.88 | 96% | | Red | 69% | 2.00 | 95% | Basic | Basic |
| Last | First | Green | 98% | 3.00 | 96% | | Red | 69% | 2.08 | 90% | Basic | Basic |
| Last | First | Yellow | 77% | 1.50 | 99% | | Red | 69% | 1.67 | 92% | Proficient | Proficient |
| Last | First | Yellow | 80% | 1.75 | 100% | | Red | 69% | 1.79 | 97% | Basic | Basic |
| Last | First | Yellow | 80% | 1.50 | 95% | | Red | 69% | 1.93 | 90% | Proficient | Proficient |
| Last | First | Red | 53% | 1.13 | 98% | | Red | 68% | 1.54 | 98% | Basic | Basic |
| Last | First | Green | 97% | 3.00 | 100% | | Red | 68% | 1.50 | 94% | Basic | Advanced |
| Last | First | Green | 96% | 2.50 | 100% | | Red | 68% | 2.17 | 94% | Basic | Proficient |
| Last | First | Green | 97% | 2.63 | 99% | | Red | 67% | 2.00 | 87% | Basic | Proficient |
| Last | First | Red | 42% | 0.88 | 98% | | Red | 67% | 1.17 | 93% | Proficient | Advanced |
| Last | First | Yellow | 93% | 2.38 | 89% | | Red | 66% | 1.75 | 87% | Basic | Proficient |
| Last | First | Green | 96% | 2.63 | 95% | | Red | 66% | 2.00 | 76% | Proficient | Advanced |
| Last | First | Yellow | 93% | 2.50 | 100% | | Red | 66% | 0.96 | 95% | Proficient | Advanced |
| Last | First | Red | 13% | 0.13 | 83% | | Red | 65% | 1.58 | 91% | Basic | Proficient |
| Last | First | Yellow | 76% | 1.50 | 100% | | Red | 65% | 2.17 | 94% | Basic | Basic |
| Last | First | Green | 97% | 2.75 | 99% | | Red | 64% | 1.50 | 92% | Basic | Proficient |
| Last | First | Green | 96% | 2.63 | 100% | | Red | 64% | 1.71 | 93% | Basic | Basic |
| Last | First | Red | 63% | 1.38 | 100% | | Red | 64% | 1.25 | 96% | Basic | Proficient |
| Last | First | Yellow | 90% | 2.13 | 98% | | Red | 63% | 1.67 | 86% | Basic | Proficient |
| Last | First | Yellow | 81% | 1.63 | 92% | | Red | 63% | 1.96 | 87% | Basic | Proficient |
| Last | First | Yellow | 88% | 2.25 | 100% | | Red | 57% | 1.08 | 97% | Basic | Proficient |
| Last | First | Yellow | 85% | 1.88 | 99% | | Red | 57% | 2.00 | 93% | Basic | Basic |

## Appendix G: Interview Participants

| School | Name | Position |
|---|---|---|
| Adams HS | Samantha | Principal |
| Adams HS | Ronald | Ninth grade administrator |
| Adams HS | Jessica | Counselor |
| Adams HS | Katherine | Teacher and ninth grade academy team member |
| Boyd HS | Jeffrey | Principal |
| Boyd HS | Lucas | Teacher and ninth grade academy coordinator |
| Boyd HS | Rachel | Ninth grade administrator |
| Boyd HS | Bradley | Former ninth grade administrator |
| Cooper HS | Sean | Principal |
| Cooper HS | Nancy | Counselor |
| Cooper HS | Cindy | Administrator |
| Donaldson HS | Robert | Ninth grade administrator |
| Donaldson HS | Barbara | Counselor |
| Donaldson HS | Eric | Teacher and ninth grade academy team member |
| Central Office | Steven | Central Office |
| Central Office | Eddie | Central Office |

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