**Section 3b: Knowledge Application**

Per the National Center for Education Statistics (2014), 6.4 million students aged 3-21 were counted as receiving special education services in 2011-2012, which translates to 13 percent of all public-school students. In addition, 36 percent of the students receiving special education services have been diagnosed with a specific learning disability (LD) (National Center for Education Statistics, 2014). In turn, there are 2.7 million students with LD in grades K-12 (National Center for Education Statistics, 2014). LD is a universal term used to describe an individual with a disorder in one or more of the psychological developments involved in “understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations” (National Center for Learning disabilities, 2014, p.2). There is no connection between students with LD and a lack of intelligence. Furthermore, because students with disabilities are heterogenous, meaning that no two students have the same strength and weakness, it can be difficult to address their needs (Solis, Ciullo, Vaughn, Pyle, Hassaram, & Leroux, 2012). Still, roughly 80% of students diagnosed with a LD have been described as having a disability in reading (Lewandowski, Cohen, & Lovett, 2013). These students can struggle with word analysis, fluency, and reading comprehension (Kim, Vaughn, Klingner, Woodruff, Reutebuch, & Kouzekanani, 2006).

Reading comprehension is one of the most vital cognitive skills students develop during primary school (Mason, 2004). Students with LD encounter challenges regarding comprehension when shifting from primary to secondary education. In the transition from primary to secondary school, the area of focus for reading moves from learning to read to reading to learn (Gajria, Jitendra, Sood, & Sacks, 2007). In secondary education, students are asked to shift from reading and understanding narrative text to deciphering expository text such as textbooks. Previous studies show that this switch can be a struggle for students and particularly students with LD (Solis et. al., 2012; Swanson, Hairrel, Kent, Callo, Wanzek, & Vaughn, 2014; Wanzek, Wexler, Vaughn, & Ciullo, 2010). Comprehension for students with LD can be problematic because these students struggle to strategically process information from text, activate background knowledge, lack metacognitive awareness, and have limited vocabulary (Berkeley, Scruggs, & Mastropieri, 2010).

There has been extensive research that identifies numerous reading comprehension interventions that are effective for students with LD. Several systematic reviews identified strategies that have a positive impact on reading achievement of students with LD, including self-questioning, identifying main topics, paraphrasing, and summarizing (Berkeley et. al., 2010; Gajria et. al., 2007; Mastropieri, Scruggs, Bakken, & Whedon, 1996; Solis et. al., 2012; Swanson, 1999; Swanson et. al., 2014; Wanzek et. al., 2010). However, with all the research that is known about impactful reading strategies, there is less information on what systemic change must occur to support those reading strategies.

Change can be a difficult process for many people who may need extended time to embrace change. Two-thirds of organizations that try to implement change fail (Bolman & Deal, 1999). To implement systemic change effectively and purposefully, one must consider who is leading the change and how are these individuals prepared to offer change? In a school, the role of the school leaders must be considered to promote effective systemic change. With reading, school leaders ought to be aware of barriers and factors that can affect systematic change that can be essential to support students with LD?

**Systemic Change**

The role of school leaders encompasses a range of skills from promoting and supporting a vision for student academic success to implementing a positive school culture. School leaders must be responsive to a range of stakeholders. The stakeholders consist of students, teachers, parents, administrators, and the community who have a direct or indirect involvement in the school. Through their survey of school leaders, Barnett, Shoho, and Oleszewski (2012) found that the challenges most reported by school leaders were (a) managing needs of students, personnel, parents, and the general public, (b) addressing and navigating multiple education hierarchies (e.s., building level, central office, state), (c) managing curriculum and instructional programs, (d) using schoolwide data that effects classroom instruction and student achievement. The challenges that typically get addressed are the ones that affect daily operations in a school (managerial tasks) (Robinson, Lylod, & Rowe, 2008). With the competing priorities, school leaders may find it difficult to prioritize instruction (Kwan & Walker, 2008). Consequently, instructional duties fall near the bottom on the priority list of day to day activities. This action can result in school leaders lacking the required skills, knowledge, and confidence to guide teachers with instructional initiatives. This in turn, creates a gap where the school leader may not have the capacity to introduce school-wide instructional initiatives.

To decrease this gap in the implementation of schoolwide initiatives, school leaders need to understand what changes must occur. When a school is applying a new schoolwide initiative, it needs to begin with a clear outline and a design for what changes are to be made. It is crucial to have a well-designed map to support the change (Crow, 2009). Specifically, a coherent design is needed for implementing, monitoring, and supporting new initiatives. School leaders should focus on three major components to support the change needed for schoolwide initiatives (Leithwood & Jantzi, 2000; McCombs, 2003).

First and foremost, it is essential that school leaders address the stakeholder’s mindset that is part of the change. A stakeholder’s mindset can be defined as an individual’s ability to accept value, build a positive rapport and relationship with other individuals, and offer solutions within a new change (Van Knippenberg & Sitkin, 2013). Within a school, values can be interpreted as the influence of a stakeholder’s belief. The stakeholder’s belief is their overall perception that they have engrained in their thinking (Bass & Steidlmeier, 1999). For example, in a school this might be portrayed as a stakeholder’s belief that “all kids can learn.” A stakeholder’s actions (volunteering in PD, collaborating with peers, implementing new strategies) should display a belief, that with the right support and strategies, all students are capable of learning.

School leaders need keen skills to recognize and change the sometimes negative mindset pervasive throughout school stakeholders. School leaders should have the skills to (a) talk with teachers to promote reflection and make suggestions, (b) encourage continuous learning, (c) emphasize the study of continuous teaching and learning, and (d) apply the principals of adult learning, growth, and development to staff development (Blase & Blasé, 2000). The mindset, whether it is positive or negative, can affect academic achievement of students and hamper systemic change. For example, if a stakeholder has a positive mindset and is always willing to believe whatever they are told, they could support strategies that would harm students’ academic achievement, even though their temperament is positive and the school culture may be cheery. If a stakeholder has a negative mindset about the capabilities of their students, they may disregard effective initiatives. Mindset is one factor of many that can hinder systematic change in a school.

A school is a complex, ever changing environment that interacts with societal systems (McCombs, 2003). Stakeholders have a belief, positive or negative, which is deeply engrained in their minds about school. For instance, we develop a set of beliefs about school from our personal experiences that translate into our own viewpoint of how a school should function (Hargreaves & Fullan, 2013). Put another way, to influence one’s mindset, the school leader must have the skills to interpret the beliefs of their stakeholders and how those beliefs manifest in the dynamic system of the school (Dweck, 2012). This allows the school leader to decide which degree of support a stakeholder might need to change their mindset. To address stakeholder’s mindset, transformational leadership has been practiced (Van Knippenberg & Sitkin, 2013). This leadership style can challenge individuals thinking and aids stakeholders in understanding their role in supporting change.

Next, in introducing a schoolwide initiative, a school leader must be able to clearly communicate and explain to stakeholders what changes will occur, within the process. The ability to communicate the change cycle effectively and rationally will decrease stress that can occur in change. The change cycle is defined as a map that depicts the human experience at each stage of change – all changes, big or small (Fullan, 2006). In a school, with a new schoolwide initiative, the change cycle can be seen in a clear systematic process. First, the stakeholders may show signs of emotions of anger (internally/externally). This behavior can be displayed with them saying phrases like, “*Another initiative. How am I supposed to do this and teach?*  *etc.*” Then, the stakeholders will move from anger to confusion, asking why there is a need for the initiative. In the school, you might hear phrases like, Next, “*I have been teaching for… I already know what to. etc.*” Then, the stakeholders will transition to understanding the need for the initiative. This can be displayed by stakeholders volunteering to be on committees for the initiatives, seeking out PD, etc. Lastly, the stakeholders will accept the initiative. In a school, evidence of acceptance can be seen in teacher’s daily instruction (Fullan, 2006). School leaders must remember that the change cycle occurs differently based on the pace of the stakeholder.

It is important that school leaders have the capability to maneuver their school through the change cycle when introducing a new initiative. When school leaders can foresee the cycles with stakeholder’s change, they can provide the necessary resources to encourage the change. Foreshadowing this cycle will support a smoother transition with a new schoolwide initiative.

Finally, to encourage systemic change, school leaders must get buy-in from as many stakeholders as possible and offer all stakeholders opportunities for ownership with the initiative. When implementing new initiatives in a school, several issues arise, (a) stakeholders encounter organizational conflict, (b) they usually are attempting new practices, and (c) stakeholders are taking on extra work by engaging with colleagues in planning, implementing, and evaluating improvement initiatives (Bryk & Schneider, 2003). With buy-in, school leaders need a large part of the staff to buy-in to combat the issues. One action to encourage buy-in from the staff is introducing the data to justify a need for the initiative to offer clarity for stakeholders. This practice will foster support and involvement from all stakeholders (Dweck, 2012).

To give opportunities for all stakeholders to establish ownership in new initiatives, a school leader must provide an avenue to get them involved in the initiatives. This can translate into stakeholders leading groups and workshops, mentoring novice teachers, attending PD, and collaborating with their peers or content teams (Muijs & Harris, 2007). Not only does this build stakeholders’ confidence within themselves, it allows schoolwide initiatives to become part of the instructional culture of the school.

When school leaders consider the systematic occurrences that occur within a schoolwide initiative, such as adoption of reading programs, it makes the successful transition attainable. The school leaders still need a tool to design a reading program and check the impact of the reading programs for students with LD. One tool that can be used to support systemic change is a program evaluation.

**Program Evaluation**

Program evaluation is a systematic method for collecting, analyzing, and using information to answer basic questions about a program (Patton, 2011). Evaluations are typically divided into two major categories, (a) formative (process evaluations, needs assessment) and, (b) summative (outcome evaluations, impact evaluation). The specific purpose of a formative evaluation is to assess whether an intervention or program model was implemented as planned, whether the intended target population was reached, and the major challenges and successful strategies associated with program implementation (Mertens & Wilson, 2012). Summative evaluations aim at assessing the results of a program. In a summative evaluation, the purpose is to figure out whether, and to what extent, the expected changes in the outcomes occur and whether these changes can be attributed to the program or program activities (Ayala & Brandon, 2008). A program evaluation is not an informal assessment, it is conducted per a set of guidelines and standards. These guidelines are the driving force for the project. Program evaluations typically involve input from all stakeholders (Leithwood & Jantzi, 2000). Simply put, program evaluations serve as tools to improve programs.

Implementing a program evaluation in a school can offer insight into what is needed for the success of a reading program. In turn, this will allow a school to maximize their resources to support reading for students including those with LD. The result of the evaluation can be cost-effective by focusing time and money on delivering services that help students and provide staff with the training they need to deliver these services effectively.

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