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Promising Practice

"From School of Crisis to Distinguished": Using Maslow's Hierarchy in a Rural Underperforming School

Molly H. Fisher Ben Crawford

Despite conditions that would work against a small and rural school in an impoverish rural area of the United States, Fairway Elementary School has managed to excel in its accountability measures. Through interviews with faculty, staff, teachers, students, and parents of children at Fairway Elementary School a model was developed through the lens of Maslow's Hierarchy of Needs. It was found that a new administrator at the school started with the physiological needs of the children and are now working within the esteem stage of Maslow's Hierarchy. Details from each stage of the hierarchy are provided as a promising practice for other rural schools. Fairway Elementary continues to succeed in their efforts to improve not only student achievement, but the culture of their school within an impoverished community.

Since the 2016 U.S. election, rural communities are gaining ground and entering the spotlight (Biddle, Sutherland, & McHenry-Sorber, 2019; Fulkerson & Thomas, 2019). Due to those changes and aggressive governmental challenges in accountability in U.S. Schools, Fairway Elementary School (herein, FES) has remained a bright light within its small rural mountain county in the South Central United States. Despite conditions that would work against this type of school in its rural location, FES has managed to excel in its accountability measures, which leaves many other schools wanting to know the secret to their success. The town of Fairway is located in Kapp County where residents are mostly native to the county or one of the six surrounding counties. The county faces many obstacles that can work against the success of their schools. Only 67.2% of the residents of Kapp County have a high school diploma, compared to 82.4% at the state level. When it comes to four-year bachelor's degrees, the percentage is less than half of the state percentage of 21%. Healthy lifestyles are not always promoted in Kapp County as they remain above the state percentage in smokers, obesity, physical inactivity, diabetes, child and infant mortality, and teen pregnancy. Kapp County regularly finds itself in the list of the 100 poorest counties in the United States and one of the top ten poorest counties in the state. Perhaps more troublesome is the drug use within Kapp County. Recent statistics show that Kapp County is in the top quartile of drug-related deaths. It is surrounded by six other counties, four of which are

also in the top quartile and two of those are in the top three counties for drug-related deaths. Due to these obstacles, many schools in the area, including FES, are labeled as "at-risk" for academic struggles.

In 2008, FES educated 173 students in grades K-6, and was deemed "low performing" and a "school of focus" due to their performance that fell below the tenth percentile within their state. Within the two years prior to that, the school had undergone four principal changes. However, this is not a case of "urbanormativity" as FES defeats the concept of "rural demonization" that rural means they are uneducated (Fulkerson & Thomas, 2019). That year, a fifth new principal was hired, and a school in dire straits began a reformation. Eight years later, in 2016, the school educated 246 students in grades K-6 and was labeled a "distinguished" school after jumping into the 90th percentile of schools in their state. Biddle, Sutherland, and McHenry-Sorber (2019) highlight the emphasis placed on rural America since the 2016 election and they state:

This moment in the national spotlight for rural communities is certainly a time to highlight the good work that has been done, but it is also a time to embrace our opportunity as boundary spanners—to build the case for the relevance of our work, not for its idiosyncrasies, but for its contribution to the broader understanding of education and social context. (p. 12)

Thus, this article aims to highlight the good work being done at FES and provide the school change model being used at FES as a promising practice that may be replicated at other rural schools.

Characteristics of Successful Schools

Previous researchers have found several themes that are prevalent within highly successful schools: Curriculum and high-quality instruction (particularly focusing in mathematics and reading) (Brown, 2016; Martin, Fergus, & Noguera, 2010; McLeskey, Waldron, & Redd, 2012), professional development for teachers (Brown, 2016; Cooper, Ponder, Merritt & Matthews, 2005; Martin et al., 2010; McLeskey et al., 2012), organization of network and resources (Cooper et al., 2005, Martin et al., 2010; McLeskey et al., 2012), using data to drive instructional decisions (Brown, 2016; Cooper et al., 2005; McLeskey et al., 2012), and creating a positive school and community relationships (Brown, 2016; Cooper et al., 2005). Not only are these themes important after a child enters kindergarten, but Lee and Bierman (2015) note that these support systems may have even more of a profound effect for lowincome students if classroom and teachers' support of students begins before kindergarten.

Schools must develop strategies for parental involvement that work with the specific population of the school (Bower & Griffin, 2011). In defining parental involvement, Smith (2006) includes times when parents use school resources, such as the school's family services office or take advantage of any service the school offers, rather than only including times parents volunteer or attend extracurricular activities. It should also be noted that parental involvement looks different for at-risk, low-income schools, as the school may need to provide services for parents as well as students, rather than expecting the parents to be an additional resource (Smith, 2006).

In a more specific case, Ingram, Wolfe, and Lieberman (2007) used a questionnaire to survey parents about their involvement in schools that serve high-achieving, low-income, at-risk populations. The findings revealed a correlation between parental involvement and higher performance, with certain types of involvement correlating higher. The most effective involvement was an investment in resources to learn at home (Ingram et al., 2007). Most encouraging from this study, was parent feedback that suggested that schools can influence parental involvement in a child's education by providing training for parents on how to help their child in the

home, as well as training for teachers on how to influence and increase the involvement parents have in the home (Ingram et al., 2007). Other research also points towards communication and home learning activities employed by the classroom teacher can have a tremendous effect on parental involvement in a child's education, therefore a teacher's instructional strategies and communication with parents potentially has an impact on parental involvement (Bower & Griffin, 2011). Butterworth and Weinstein (1996) suggest creating a "diversity of niches" for students, staff, and families to feel welcome, included, and give them a place to explore and share their talents in order to create a community of motivated and successful learners.

Models for School Change

There is always a need for growth and improvement in schools; therefore, schools consistently find ways to change. Woolner, Thomas, and Tiplady (2018) report about the changes at Southside School and Town End Academy by following a model based on the work by Priestley (2011) beginning with the *supporting* stage with basic events with parents, new curriculum, staffing, and training. After that, the changes must be sustaining through enacting, enhanced collaboration and training, and increased parental involvement to eventually arrive at the institutionalization stage of change that supports a shift in thinking for students and teachers. Each stage of change within the model contains three locations for change: individual, structural, and cultural. The school change program detailed by Darling-Hammond, Ramos-Beban, Altamirano, and Hyler (2016) focuses on student achievement by promoting more personalized instruction, college preparation, multiple paths to learning, flexible supports, highly competent educators, and engagement within the community.

The Collaborative for Academic, Social, and Emotional Learning (CASEL) promotes the use of social and emotional learning (SEL) to assist with academic growth in schools (CASEL, 2003). By teaching self-awareness, self-management, responsible decision-making, relationship skills, and social awareness in their classrooms, it can improve academic achievement and these key components are supported at the school and community levels. While models focusing on student-specific endeavors are needed, other useful models can and should focus on the entire school, including physical spaces

(Woolner, Thomas, & Tiplady, 2018). While student achievement is the ultimate goal, FES has cast a wider net on school changes, which can be better described through a more all-encompassing framework.

Maslow's Hierarchy of Needs

A.H. Maslow developed a hierarchy of human needs which can be and has been applied to a myriad of audiences since its initial inception (Maslow, 1943). Those applications range from non-education fields such as religion (Anburaj Balraj, 2017), farming (Cheng & Qi, 2015), and financial planning (Lee & Hanna, 2015) to education research studying student retention in higher education (Brookman, 1989), teacher's needs (Weller, 1982), and more specifically, the needs of mathematics teachers (Fisher & Royster, 2016). This hierarchy consists of five stages, and each stage is dependent on the satisfaction of the prior stage (Maslow, 1943). The beginning stage of Maslow's hierarchy is the physiological stage and contains the needs of humans to survive. Before humans can feel love or esteem, they must first have food, water, shelter, and sleep. After the satisfaction of the physiological stage,

humans move to the *safety* stage that involves the removal of threats of danger, good health, organization of a schedule, and job security. The next stage of the hierarchy is the love stage. A human's love needs reside in the presence of friends, family, and the love of a partner. Maslow (1943) emphasizes that the love stage not only involves receiving the love of others, but also giving love to others. The penultimate stage of Maslow's hierarchy is the esteem stage. This is the point where a human has self-respect as well as the respect of others and satisfaction of the esteem stage leads to higher selfconfidence and self-efficacy. The final stage, selfactualization, is a very theoretical stage as it can mean many things for different people. It represents a stage of self-fulfillment where one can "become everything that one is capable of becoming" (p. 382).

In 2016, Fisher and Royster used Maslow's hierarchy to support the needs of teachers. They used prior research of Maslow's hierarchy combined with their interviews with mathematics teachers to create a similar hierarchy for teachers. That model, compared with Maslow's original hierarchy, is found in Figure 1, below. While Maslow's hierarchy was originally

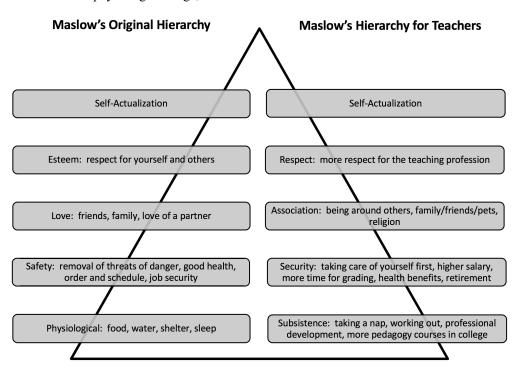


Figure 1.

Maslow's Original Hierarchy (Maslow, 1943) compared to Maslow's Hierarchy for Teachers (Fisher & Royster, 2016)

written for basic human needs, its purpose has been transformed for educational purposes; however, research for how it is incorporated for *children's needs* in schools is not prevalent. The hierarchy developed by Fisher and Royster (2016) combined with Maslow's original hierarchy (1943) can be used as a starting point for developing a similar hierarchy for children that can be used in at-risk schools to meet the needs of students.

While many research studies exist that outline individual strategies for improving school success (Brown, 2016; Martin, et al., 2010; McLeskey, Waldron, & Redd, 2012; Cooper et al., 2005), larger and more encompassing models for school change (Woolner, et al., 2018; Priestly, 2011; Darling-Hammond, et al., 2016), and using Maslow's hierarchy to support individuals' needs (Brookman, 1989; Weller, 1982; Fisher & Royster, 2016), there is not research to support the use of Maslow's hierarchy to support school change. This research is unique in that Maslow's hierarchy is not being used to support a single group of individuals, rather it is used as a lens to support success of an entire school of children, parents, faculty, staff, and the community.

Methodology

In order to best understand the interventions and changes taking place at FES, a quasi-experimental qualitative approach was used to collect and understand the interventions. "Category Construction" (Merriam, 2009) was used to develop interview protocols and analyze the data for emergent themes.

Participants

The participants in this qualitative study consist of the faculty, administration, other school personnel, students, and parents from Fairway Elementary School. The students at FES closely represent the population of their rural county with a population of 98% white students and over 90% that qualify for free/reduced lunches. Many students in the school face unimaginable hardships at home such as being raised by grandparents or other family members, not having sufficient food supplies, and not being able to purchase needed school supplies. Consequently, few children are considered "Kindergarten Ready" when they begin at FES. The Brigance Assessment is used to assess readiness for entering Kindergartners and in

2015, only 18% were deemed ready, compared to only 7% the year before.

There are 13 certified teachers at FES in grades K-6 (which includes two teachers of exceptional children) and they closely represent the typical population of elementary teachers in that they are predominantly white females (all white, 11 females, 2 males). In addition to these K-6 certified classroom teachers, there are a myriad of support staff and other faculty consisting of specials teachers, a curriculum coach, a reading recovery specialist, computer lab coordinator and others, all with a variety of educational backgrounds and experience levels. The name of the school as well as all participants have been changed for anonymity.

Data Analysis

All participants were interviewed using a semistructured interview protocol. Parents, students, faculty, and administrators were all interviewed with a different protocol, but each protocol was organized by similar themes. Each began with demographic questions and then proceeded to ask questions about their individual teaching/learning preferences and then questions regarding the school. Example questions from each protocol are found in Table 1. First, certified teaching faculty were interviewed in small focus groups of two to six per group in order for researchers to learn more about the school and students as well as establish a relationship with the faculty. Then, approximately a month later, more detailed individual interviews took place. Of the 13 certified classroom teachers, 12 were interviewed as one was not available during the interview visits. In addition to those 12 teachers, nine other faculty and support staff were interviewed, including the curriculum coach and the principal, as well as a sampling of seven students, stratified by grade level and three guardians that were not already employed by the school (many school staff members also have children attending FES). Staff and student interviews were audio-recorded and later transcribed for analysis. Parent interviews were conducted via telephone and the data consists of researcher notes from those conversations. "Category construction" (Merriam, 2009) was used to analyze the data for relevant themes or "categories". The responses were entered into a data analysis table and organized such that each participant had their own column and each row represented questions from the interview protocol in order to compare all answers in one row.

Table 1
Sample interview questions

	Demographic Level	Individual Level	School Level
Teachers	What grade do you teach?	What do you do for students	Do you think FES is a
	How/Where were you certified to teach?	that are falling behind? Or, advanced students?	successful school? Why or why not?
Administrators	Were you formerly a teacher?	What would you recommend a	How do you use student data
	(What grades?)	teacher do for students that are fallings behind? Or, advanced	to make decisions?
		students?	
Students	What grade are you in?	How does your teacher help you learn?	What makes you try hard at school?
Parents	How many children do you have attending FES?	How often and to what extent do you discuss school with your child(ren)?	Have you ever volunteered at FES? In what ways?

Merriam (2009) suggests identifying "segments in your data set that are responsive to your research question." (p. 203). This data entry procedure resulted in themes emerging from those segments and the relevant responses were organized into smaller groups based on these emergent themes and new categories. Merriam (2009) describes these categories as "same as a theme, a pattern, a finding, or an answer to a research question" (p. 178).

One member of the research team took notes while conducting the interviews based on the different categories of the protocol. After the interviews were transcribed, the other member of the research team used the transcripts to organized actual responses into categories. Both researchers then came together to determine the overall themes and come to a consensus of the themes (Harry, Sturges, and Klingner, 2005) in order to reduce single researcher bias. As themes started to emerge, the researchers found that the transformation of FES followed a particular trajectory that closely matched the themes outlined in Maslow's Hierarchy. These overarching themes regarding the success of FES emerging from the interviews were organized into Maslow's Hierarchy to best represent the resources used to improve the success at FES. The results of those categories, as they relate to the first four stages of Maslow's hierarchy, were analyzed and those results aided in the design of a hierarchy that represents an entire school (Figure 2). Upon completion of the data analysis, the results were shared with Principal Thomas and Ms. Lewis (the curriculum coach) as a form of "member checking" (Creswell & Miller, 2000). They provided feedback and clarifying

comments to better describe particular themes of the data analysis, which improves the validity of the qualitative data collected.

Results

At this time, FES's central focus is on school culture and instilling pride in the students and parents in the community (Esteem), but that was not their initial focus when their new principal, Mr. Thomas, started in 2009. He was aware that there were more important concerns at that time, and they started with physiological needs.

Physiological Stage – Resources for Students, Faculty, and Parents

Principal Thomas and his staff have become quite resourceful in acquiring resources for staff and students. In 2009, he realized that many of the students at FES were not receiving proper nutrition and food at home over the weekends. Using funding from some local agencies, they started a program that provided those students with food every Friday. At the end of each week, those students received a backpack full of food to nourish them through the weekend. At that time, every student at FES was receiving the food each week. Now, less than 30% of students each week are receiving this additional supplement.

Much of the growth of FES can be attributed to the educational resources made available to students, teachers, and families. Research shows the efficient

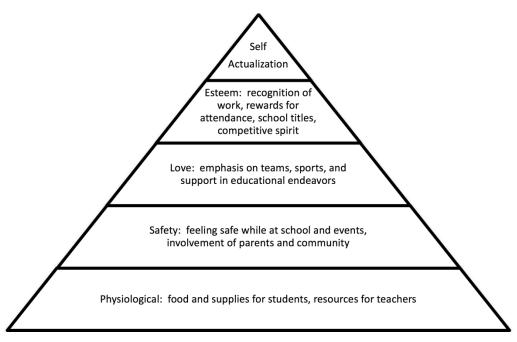


Figure 2
Maslow's Hierarchy to Support Struggling Schools

use and flexibility in using resources are common themes in high-performing, high-poverty schools (Kannapel & Clements, 2005). At FES, teachers are met with almost any need they have with a responsive administrator and swift action. When asked if there was anything needed to make teachers' jobs easier, Miss Haste, a fourth-grade teacher, responded with "Honestly, I couldn't think of anything. If I need a supply, if I have an idea, if I have a concern, there's never been anything I went to him [Principal Thomas] with that he's not went out of his way to make it happen."

Each teacher interviewed was asked to identify their "greatest resource at this school." Often, teachers gave multiple answers because they know who to go for the type of support they need. "That's a tie, because I have several people I go to." Said Miss Haste. The most common answer to this question was the curriculum coach, Ms. Lewis. She is credited for being able to answer any question anyone in the building has, or she at least promises to return with an answer. She also creates pacing guides for each teacher and goes through them and how they connect to common core state standards. Ms. Lewis also reviews data from standards-based assessments with teachers in an effort to guide future instruction, enrichment, and interventions.

When it comes to technology, the school has slowly immersed itself in resources to support students, teachers, and families. Prior to 2008, FES had few working electronic resources such as computers. The school is now working to become one-to-one with Chromebooks in the coming years through funds donated from agencies familiar with the school. Students use these on a daily basis to support learning through the use of common core aligned math and reading programs. This resource fuels the intensive intervention program at FES. Almost every teacher also uses "Class Dojo", a communication tool that anonymously notifies students of behavior issues in the moment without disrupting the flow of the class and drawing attention to the student's misbehavior. It also provides information to parents through a messaging system that can be used on a computer or mobile device. In addition to these classroom technologies, the administration ensures support staff, such as interventionists, speech therapists, etc. are given the technology and resources they need.

Physiological to Safety Stage – Involving All Stakeholders

Research has shown a correlation between parental involvement and high student performance

(Ingram et al., 2007); however, Bower and Griffin (2011) found that parental involvement opportunities must be specific to the population of the school. This is something that FES excels in as they carefully plan activities that support the families involved with the school in order to increase involvement. Recently, FES began using family gatherings and meals to promote parent involvement. Prior to 2008, students and their parents rarely attended school-related functions outside of the school day. Now, these events are how many teachers communicate with parents. Typically, around once per quarter, they host an event either before school hours or in the evenings and the cafeteria workers prepare a meal suitable for the time of the event. They have hosted breakfast meals, dinners, full Thanksgiving meals, ice cream socials, and other events to bring parents and families to the school. This is a time for parents to learn more about the school, the principal, and their child's teachers. The teachers also use this time to informally communicate with parents about their child's progress and other upcoming events. The informal communication is very important for Principal Thomas. Formal conferences are intimidating for parents as many of the parents involved with the school did not finish high school, so being in a room with several education professionals is overwhelming for them. Thus, these informal events remove the intimidation factor involved with attending a meeting at their child's school. Principal Thomas explains, "When we engage them, I think it's more of a culture piece, versus the academic." He believes once the supportive culture is established, the academic culture will come naturally.

At least once per year, FES hosts a "parent workshop" where they invite parents to the school to learn about the school curriculum resources. They typically pair this event with their winter holiday program in which most students are involved in order to promote higher attendance. During this event, the faculty teach the parents how to use the online resources available with their curriculum materials and how to log into the parent portal and check their child's progress. Since this occurs in the month of December, it is prior to the possible winter weather days that can cause cancellation, so it is an ideal time to teach parents about the non-traditional instruction days that may be needed during the upcoming winter months. When Ms. Lewis (the curriculum coach that plans most of these events) was asked whether they had strong participation, she stated "A lot come to that because we feed them." Hosting a family meal

has proven to be a successful tactic for inviting parents and families to the school since many of the families involved with FES students do not consistently receive hot meals. In regard to these family nights, Ms. Owens, an instructional assistant, says, "...when they do open house [in the past], I remember we might have 20 people, now you can barely get in. We do a Thanksgiving dinner and there will be a line out the door. [Principal Thomas] definitely got the community involved."

These types of informal meetings and opportunities for community involvement help parents learn more about the school and all of the staff members, not just the one teacher their child will spend the majority of their day with. Mrs. Green, a parent of FES children, said "When you take your kids [to school], you never know who all is going to see the kids that day. It makes you feel at ease [at FES] because you know who your kids are with."

Love Stage – Educational Support and a Focus on Teamwork

A Spotlight on Sports. FES prides itself on its winning athletics teams. This may appear to be a gratuitous focus for those not directly involved with the school, but for those in the community, the connection is apparent. The school has two boys' basketball teams (one for lower grades and one for higher grades) and the teams regularly perform in the county basketball championship. In addition to the boys' basketball teams, they support cheerleading squads during these events. The cheerleaders perform during basketball games and also compete for the county titles in cheerleading each year. The emphasis on sports at FES is not always about the sport itself, it is about the connections made, teamwork, friendships, and pride in the school. This is further confirmation that Principal Thomas believes that you embrace the students, parents, community, and culture (Love Stage), then the academics will fall into place as a result (Esteem Stage). As a student, this is another opportunity to have the teachers cheering you on. One parent, Mrs. Green, who has had up to three children at FES at one time, noted that Principal Thomas and nearly all of the teachers attend the sporting events to cheer for all of the students, not just their own children that may be playing in the sport.

The faculty also now emphasize the importance of sports in supporting community involvement and use these events to capitalize on parent contacts.

During the basketball games at FES, the basketball gym is full of students, parents, and other community members there to support their local team. Ms. Edwards candidly describes her informal parent meetings at basketball games, "I can catch them at ball games...I don't know how many parent-teacher conferences we have at ball games. But, they'll start it with 'How are they doing in class' and I'm like, 'Well, glad you asked.'" This pride for the sport and their success in it means that students want to come to FES to participate in their sports programs because they want to participate in a program with that level of support and excitement.

Educational Intervention System. Beyond the focus on sports, FES provides educational support through an organized intervention system designed to provide opportunities for students to work with faculty and staff members to get caught up to grade level. The most commonly identified strategy for success in a high-achieving, low-income, rural school is the creation of a support system or structure that provides various types of support needed specific to its faculty, staff, students, and families (Kearney et al., 2012; Barley & Beesley, 2007; Education Trust, 1999; Cooper et al., 2005; Martin et al., 2010; Brown, 2016). FES implements a three-tiered intervention system to support students at all levels.

Tier I – Identification. The intervention system at FES begins with the identification process, where students are categorized by achievement and identified early when a problem arises. At the beginning of each school year, grade levels with more than one class are split into different teachers' classes by ability group. This allows for teachers to provide consistent interventions and alternative instruction when needed. Miss Haste explains her lower-ability fourth grade class, "We are ability grouped by homeroom, so my whole group is struggling, so what we do is I go back in the afternoon and I address missing skills. So, our afternoon block is completely based on what skills are they missing and what they need most as a fourth grader."

In addition to creating homeroom classes by level, the school has mathematics programs that differentiates assignments for students. Pearson's enVisionMATH program provides differentiated instructional resources, formative assessments, and practice assignments. There are also reading programs, including IXL, Lexia Learning, and

Alphie's Alley, which place students on their current level and advance them as they progress through content. The school's curriculum coach works alongside teachers to use these diagnostic computer programs to understand where students are struggling and when they need further instruction. All of these strategies begin within the classroom and if teachers see a need for further help, they begin Tier II intervention and actually begin to pull students out of the classroom.

Tier II - Intervention Outside of the Traditional Classroom. For Tier II intervention, students are placed by grade-level into a math and/or reading intervention group with a supplemental staff member. Throughout their Tier II interventions, data is kept and reported to the school's curriculum coach. Once a student shows growth and is caught up, they may be removed from the Tier II intervention group(s) to create room for other students. Sometimes a student may remain in Tier II interventions for a prolonged amount of time, allowing them to receive continuous interventions as needed. There are full-time interventionists who are classified staff members, and certified "specials" teachers, such as the gym teacher and the computer lab teacher, that serve their time outside of their typical classes working with students to catch them up to grade level. Ms. Williams is the computer lab teacher that regularly works with students that are in various tiers of the intervention system. She describes her work with these students by saying, "they have to go through 3 tiers before you can try to get them tested [for special education]. So, that's what they're getting with me – one on one and small group…Lots of interventions so we can document and test for special ed." This time is available to those interventionists because the school is so small it only requires less than half-days of teaching those classes to see all students once per week, so teachers like Ms. Williams can still conduct her computer lab instruction as well as assisting in the tiered intervention program.

Tier III – One to one instruction. Once tier II interventions are put in place for a prolonged period of time, students may be referred for tier III intervention if there is little to no improvement. Once a student reaches tier III, they are assigned to an individual teacher, where they use varied strategies to teach basic skills that hinder students from learning in the traditional classroom. If the student does not

show progress with the tier III interventions, then they will begin a referral and testing process for special education classification.

The entire intervention system is fluid and adjusts to student's needs based on data collected by both classroom teachers and interventionists. This is consistent with the findings of Martin et al. (2010), which identified two of four key strategies for meeting the needs of the whole child: network organization and network supports to have an organized line of support to meet the students' needs. Both the principal and curriculum coach support each step of intervention and ensure the process continues to meet the needs of all students. This new and organized intervention system ensures that at no level in the process does any staff member essentially give up on any student. Principal Thomas describes this mentality by saying, "My advice, is you can't give up on them. A lot of times, it might be that relationship builder. I think that if a kid will 'run through a wall' for you, they're more apt to listen and participate and try to do better."

Educational Support Beyond School Walls.

The curriculum and resources available inside and outside of the school impact the student learning as well as the parent support, especially in a topic such as mathematics that many parents have not learned in many years. Frustrated parents that are many times decades removed from mathematics courses can get additional help through the curricular resources available at FES. The use of enVisionMATH for their instruction as well as an online resource called IXL for remediation help expedite the learning process in mathematics. The enVisionMATH curriculum contains online videos and help sites designed for parents to help provide them instruction for helping their child outside of the school day. In reading, FES uses the Reading Wonders program by McGraw-Hill where students receive specialized support to better meet their needs and provide assignments via computer that they can complete from home. This supports previous research indicating that having ways to learn at home as well as parental instructions can be beneficial for increasing parental involvement (Ingram et al., 2006; Bower & Griffin, 2011). These curriculum and software resources also provide differentiated assignments for students, depending on their level of understanding.

During the winter months, when absenteeism is above 15% for three to five consecutive days, the school system will close schools to allow time for

students and staff to recover from illness. During the 2016-2017 school year, Fairway Elementary lost 13 instructional days, with the majority of them due to illness. They were allowed 9 "non-traditional instruction" days in which students completed assignments from home in order for the day to be counted as an instructional day. FES teachers do not let days like this prevent them from teaching the concepts they are required to teach. The online videos and curriculum through enVisionMATH, IXL, and Reading Wonders are invaluable for teachers, students, and parents when instruction must take place at home. For students who do not have access to the internet at home, teachers provide "snow packets" of assignments that they can complete for credit in order to remain caught up with instruction.

Esteem Stage - A Focus on School Culture

The culture at Fairway Elementary School is one of support and competitiveness. One parent, Mr. Vail, even remarked that they were "more concerned about basketball, attendance, rewards, and being in the spotlight" implying this could be a negative attribute of FES; however, this level of competition supports the conclusion that FES is currently resting comfortably in the Esteem Stage of Maslow's Hierarchy. Teachers and students are not competitive with one another, yet they are competitive with their own personal growth and other schools. They always work to improve and show growth and achievement. Research highlights the importance of establishing a positive school community with professional learning communities in mind (Brown, 2016). Ms. Robinson, a special education teacher, says the school has a "competitive spirit" and "Everyone works as a team, for the good of the school as a whole." This competitiveness was a consistent theme when asked to describe the school or administration in one word or phrase. Teachers attribute this competitive school spirit entirely to the principal, Mr. Thomas.

This competitive spirit drives students, faculty, and families alike to improve in many facets of their lives. When it comes to student growth and achievement, students are positively reinforced consistently with verbal praise, field trips, and other various recreational opportunities. Any type of win or improvement is celebrated and made to be a big deal for students, even something as simple as having the highest attendance percentage in the district for the week. This simple celebration keeps students wanting to come to school and their attendance stays high,

ensuring students maximize their time for instruction and interventions.

Similarly, teachers are competitive in that they want to improve their own practices and classrooms. Teachers seek out help for anything they need and provide support for other teachers when needed. They come together as a team to be the best school they can possibly be. When asked about the school's success, Ms. Hall, an instructional assistant, responded, "I think because everybody works together, you know, everybody wants what is best for our kids and we want to see our kids succeed."

Final Remarks

FES, considered an at-risk school, has persevered through remarkable odds to be the highest performing elementary school in its district. Their efforts have established a competitive nature among *all* of their stakeholders that keeps their motivation high. While every school is different, FES has found a recipe for success that other administrators and school personnel can learn from and replicate. Using Maslow's Hierarchy to focus on the needs of the school and children, one "rung of the ladder" at a time, is a success model but must be replicated with specific tactics that meet the needs of the student population and community.

There is not an "overnight success" potion for improving in school accountability measures. It happens over time and with gradual increases and a changing focus as goals are met. When Principal Thomas started at FES in 2008, they were in the lowest ten percent of schools in their state. They were

still in that lowest ten percent in 2013. In 2014, they jumped to the 38th percentile, and in 2015, 7 years after Principal Thomas began, they rose to the 90th percentile. It is important to note, however, that the population of students did not change. The percentage of students on "Free and Reduced Lunch" fares are a common SES indicator in schools and FES currently has over 90% of students on a free or reduced lunch fare, which hasn't changed since Principal Thomas was hired. What has changed is the school culture and the pride the students take in their school, their academics, and their community.

Mr. Lyle describes the culture by saying, "it's not just our test scores, the fact we went *from school* of crisis to distinguished...it's successful because our atmosphere is not just our school – our students know we care about them. The staff – and that includes administration to cooks and janitors, to aides, teachers, and even our volunteers...the kids know they're taken care of. They know we'll take care of them no matter what and we're teaching them what they need to know." Principal Thomas agrees, saying "That's one of our secrets here...even for kids poverty stricken like we have here, they need us...drive it in them and instill in them that relationship; Know more about them than their test grade; Know about them outside of school." That spirit and pride for a school and community is the change that this school needed when they were in crisis mode merely eight years ago. The first step was focusing on those physiological needs in Maslow's Hierarchy. Then, following each subsequent step has taken this at-risk school to distinguished status.

References

- Anburaj Balraj, N. (2017). Foundational elements of Maslow's Hierarchy of Needs and Jesus Christ's teachings of human need management. *Catalyst*, *15*(1), 77-88.
- Barley, Z. A., & Beesley, A. D. (2007). Rural school success: What can we learn. *Journal of Research in Rural Education*, 22(1), 1-16.
- Biddle, C., Sutherland, D.H., & McHenry-Sorber, E. (2019). On resisting "awayness" and being a good insider: Early career scholars revisit Coladarci's swan song a decade later. *Journal of Research in Rural Education*, 35(7), 1-16. https://doi.org/10.26209/jrre3507
- Bower, H., & Griffin, D. (2011). Can the Epstein model of parental involvement work in a high-

- minority, high-poverty elementary school? A case study. *Professional School Counseling*, 15(2), 77-87.
- https://doi.org/10.1177/2156759x1101500201
- Brookman, D. M. (1989). Maslow's hierarchy and student retention. *NACADA Journal*, *9*(1), 69-74. https://doi.org/10.12930/0271-9517-9.1.69
- Brown, G. (2016). Leadership's Influence: A Case Study of an Elementary Principal's Indirect Impact on Student Achievement. *Education*, 137(1), 101-115.
- Butterworth, B., & Weinstein, R. S. (1996).

 Enhancing motivational opportunity in elementary schooling: A case study of the ecology of principal leadership. *The Elementary*

- School Journal, 57-80. https://doi.org/10.1086/461849
- CASEL (2003). Safe and sound: An educational leader's guide to evidence-based social and emotional learning (SEL) programs. Chicago: CASEL.
- Cheng, L., & Qi, W. (2015). A study of farmers' rationality based on Maslow's Hierarchy of Needs. *Asian Agricultural Research*, 7(12), 63-68
- Cooper, J. E., Ponder, G., Merritt, S., & Matthews, C. (2005). High-performing high schools: Patterns of success. *NASSP Bulletin*, 89(645), 2-23. https://doi.org/10.1177/019263650508964502
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, *39*(3), 124-130. https://doi.org/10.1207/s15430421tip3903 2
- Darling-Hammond, L., Ramos-Beban, N., Altamirano, R.P., Hyler, M.E. (2016). *Be the change: Reinventing school for student success*. New York: Teachers College Press.
- Education Trust. (1999). *Dispelling the myth: High poverty schools exceeding expectations*. Washington, DC: Author.
- Fisher, M. H. and Royster, D. (2016). Mathematics teachers' support and retention: Using Maslow's Hierarchy to understand teachers' needs.

 International Journal of Mathematics Education in Science and Technology (47), 7, pp. 993-1008. https://doi.org/10.1080/0020739X.2016.1162333
- Fulkerson, G. & Thomas, A. R. (2019). *Urbanormativity: Reality, Representation, and Everyday Life.* Lanham: Lexington Books.
- Harry, B., Sturges, K. M., & Klingner, J. K. (2005). Mapping the process: An exemplar of process and challenge in grounded theory analysis. *Educational Researcher*, *34*(2), 3-13. https://doi.org/10.3102/0013189x034002003
- Ingram, M., Wolfe, R. B., & Lieberman, J. M. (2007). The role of parents in high-achieving schools serving low-income, at-risk populations. *Education and Urban Society*, *39*(4), 479-497. https://doi.org/10.1177/0013124507302120
- Kannapel, P. J., & Clements, S. K. (2005). *Inside the black box of high-performing high-poverty schools: A report from the Prichard Committee for Academic Excellence*. Lexington, KY: Prichard Committee for Academic Excellence. http://people.uncw.edu/kozloffm/highperforming highpoverty.pdf

- Kearney, W. S., Herrington, D. E., & Aguilar, D. V. (2012). Beating the odds: Exploring the 90/90/90 phenomenon. *Equity & Excellence in Education*, 45(2), 239-249. https://doi.org/10.1080/10665684.2012.661248
- Lee, J.M., & Hanna, S. D. (2015). Savings Goals and Saving Behavior from a Perspective of Maslow's Hierarchy of Needs. *Journal of Financial Counseling & Planning*, 26(2), 129-147. https://doi.org/10.1891/1052-3073.26.2.129
- Lee, P., & Bierman, K. L. (2015). Classroom and teacher support in kindergarten: Associations with the behavioral and academic adjustment of low-income students. *Merrill-Palmer Quarterly*, 61(3), 383-411. https://doi.org/10.13110/merrpalmquar1982.61.3.0383
- Martin, M., Fergus, E., & Noguera, P. (2010).

 Responding to the needs of the whole child: A case study of a high-performing elementary school for immigrant children. *Reading & Writing Quarterly*, 26(3), 195-222. https://doi.org/10.1080/10573561003769582
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*, 370-396. https://doi.org/10.1037/h0054346
- McLeskey, J., Waldron, N. L., & Redd, L. (2012). A Case Study of a Highly Effective, Inclusive Elementary School. *The Journal of Special Education*, 48(1), 59-70. https://doi.org/10.1177/0022466912440455
- Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. San Francisco: John Wiley & Sons.
- Priestley, M. (2011). Schools, teachers, and curriculum change: A balancing act? *Journal of Educational Change*, *12*(1), 1-23. https://doi.org/10.1007/s10833-010-9140-z
- Smith, J. G. (2006). Parental involvement in education among low-income families: A case study. *School Community Journal*, 16(1), 43.
- Weller, L. D. (1982). Principals, meet Maslow: A prescription for teacher retention. *NASSP Bulletin*, 66(456), 32-36. https://doi.org/10.1177/019263658206645605
- Woolner, P., Thomas, U., Tiplady, L. (2018). Structural change from physical foundations: The role of the environment in enacting school change. *Journal of Educational Change, 19*(2), 223-242. https://doi.org/10.1007/s10833-018-9317-4

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