**White Paper**

By: Emily Brown, David Copeland, Meagan McKinney, and Heather Wilkie

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**Introduction**

Imagine if a catastrophe hit the Earth and erased all our past knowledge. People cannot roam around Earth not knowing anything. As a team we have been tasked with developing a new schooling system for the lower elementary grade levels. As a task force we have developed a curriculum, and philosophy of teacher and assessment processes. Through research and personal experience we have tried to plan ahead for challenges that might develop. It is our hope that this plan will allow us to build our community up to a successful part of the Earth.

**Population**

It is always important to understand where your students are coming from in order to decipher any background issues that may affect ones learning. The school setting we have chosen to build is set in a rural area in Georgia. The National Center for Educational Statistics (NCES) defines rural areas as “territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster” (Office of Management and Budget, 2000). Usually a rural population is of homogenous nature students, “lack of opportunity to interact with persons of varying backgrounds may be a limiting factor in their educational and sociological development” (Dunne, 1983). “Rural children are more likely to live in poor families, are more vulnerable to death from injuries, and are more likely to use tobacco than their counterparts in urban areas” (United States Department of Health and Human Services, 2011). With this being said we must provide a diverse array of teacher backgrounds in order to try and bridge gaps in students learning. The great thing about teaching in a rural school is that rural people are, “proud of their schools and typically described a feeling of family, individual attention and community commitment of resources and people” (Dunne, 1983).

Our school is made up of 1,892 Prekindergarten through Third grade students. The grade levels are broken up as follows:

* Prekindergarten – 264 students
* Kindergarten – 418 students
* 1st Grade – 396 students
* 2nd Grade – 418 students
* 3rd Grade – 396 students

For every 22 students we will have 1 teacher except in prekindergarten which will have 1 teacher per 11 students. The teachers that make up the faculty of our school will come from a diverse array of backgrounds. This will allow us to bring a more urban feel to our rural school.

**Curriculum**

The students in our Lower Elementary School will need to learn social development. According to Daniela Maree Ashdown and Michael Bernard, “The development of social-emotional competence is an important foundation for young children’s later success and well-being (Ashdown & Bernard, 2005). The curriculum will focus on working with the students on following rules. Students will be on a school wide behavior plan that will help them learn to accept responsibility for their actions. The behavior plan will be monitored in each classroom. Each classroom will have a color coded behavior system. Blue is excellent behavior and no rules have been broken. Green is good behavior and one rule has been broken. Yellow is ok behavior and two rules have been broken. Red is unsatisfactory behavior and three rules have been broken. The school will also have a common set of rules that each child will use to guide their conduct. According to Diana Browning Wright, “When parents, teachers, kids, administrators, and other school staff develop a behavior plan together, success is more likely” (Wright, n.d.). The school wide rules at Lower Elementary School are to listen and follow directions in all areas, keep your hands and feet to yourself, and to be kind and courteous to others. Students will also be expected to accept responsibility for their actions. Another aspect of social development that will be focused on is the ability to interact with each other and govern themselves. The students will be required to solve conflicts peacefully, give and receive feedback from each other, and learn to problem solve.

The subjects that will be emphasized at Lower Elementary School are English and language arts related, as well as basic math skills. The pre-k and kindergarten students will focus on letter and letter sound recognition, phonological awareness and counting skills. A good phonological awareness program should include an emphasis on the letter and letter sound relationship and an emphasis on blending and segmenting tasks (Callaghan & Madelaine, 2012). The first grade through third grade students will work on phonological awareness, reading, reading comprehension, and they will build on counting skills and begin math computation. All students will work on writing skills, computer skills, and typing skills. The use of computers will be emphasized because they have a positive impact on the child’s social-emotional, language, physical, and cognitive development (Mohammad & Mohammad, 2012). The Lower Elementary School will not focus on the subjects of science and social studies. The students need a good reading and math foundation before beginning other subjects.

The skills that will be developed at Lower Elementary School involve the student’s ability to socialize. Skills will be taught to help students socialize with one another, teachers, and other adults in the school. The students will role play scenarios that display appropriate and inappropriate ways to interact with each other. For example, sharing versus taking the toy for yourself without asking. Students will be given opportunities to interact with one another. According to Marilou Hyson and Jackie Taylor, “Wanting to play with their friends, young children may feel motivated to behave prosaically, because other children may not want to play with them unless they cooperate, help solve problems, and engage in flexible give-and-take” (Hyson & Taylor, 2011). Another skill that will be nurtured is the ability to think through higher order tasks. These students will need to be able to problem solve and explain why or how they got the answer or solution. If students are able to reason and perform higher order tasks, this would help with behavior issues as well. Students will be able to think about consequences before doing something.

The dispositions that will be nurtured at Lower Elementary School will be values related to positive character traits. Students will be taught to share, care, display honesty, tolerance, and respect for themselves, others, and their school. Teachers will foster a positive learning environment where there is a focus on the child’s social and emotional development. Praise will be given when the child shows a positive character trait. Students will also be working on their social behavior.

**Philosophy of Teaching and Learning**

*Philosophical Foundations*

The philosophical foundation of our school is based off the philosophers of Piaget and B.F. Skinner. We have devoted ourselves to building a school based on positive behavior reinforcement and developmentally appropriate instruction. Piaget believed that, “operative intelligence is responsible for the representation and manipulation of the dynamic or transformational aspects of reality and that figurative intelligence is responsible for the representation of the static aspects of reality” (Piaget & Inhelder, 1973). We believe that giving children real world problems will help them build a deeper understanding of the learning objectives they will be required to master before entering the next grade. B.F. Skinner “believed that behavior is maintained from one condition to another through similar or same consequences across these situations. In short, behaviors are causal factors that are influenced by the consequences. His contribution to the understanding of behavior influenced many other scientists to explain social behavior and contingencies” (Carlson, Neil, & et al., 2010, p.433). We believe as a whole that using positive reinforcement will help manipulate a constant good behavior throughout our school. By using a bit of both theories we will be able to develop school that is developmentally appropriate for every child that walks through our door.

*Schooling Environment*

It is the goal of our administration and faculty to provide students with a bright and cheerful learning environment. We will work hard to build a school environment that has a welcoming atmosphere where students are able to enhance their knowledge about the world around them (Sheridan & Williams, 2011). Children will be provided with real life hands on lessons for research says, “children construct an understanding of the world around them, and then experience discrepancies between what they already know and what they discover in their environment” (McLeod, 2012). While walking around the school you will find student work displayed outside in the hallways. If you peek in the room’s students will be working on several learning projects of their choosing based on the current learning objectives. Our classroom environments will encourage teachers and students to interact, communicate, and learn from each other in a constructive way (Sheridan & Williams, 2011). It is our goal to provide students with differentiated learning in order to bridge learning gaps in our student’s education.

*Teaching Processes*

Teachers will implement a data driven instruction plan. By using assessment scores to plan instruction individual students instruction needs can be met. Grade levels will meet weekly for at least 45 minutes to discuss data and plan for the next week’s instruction. Teachers will administer student interest and intelligent tests at the beginning of the school. Instruction topics will be planned around the answers to those tests in order to keep students engaged and excited about their learning. Teachers will develop engaging project based learning activities making sure to provide plenty of choice to students. By creating engaging and data driven instruction, student’s achievement scores should meet and exceed standards.

*Assessing Learning*

Teachers will use both formative and summative assessment strategies to plan instruction for students. Student’s summative portfolios will contain a plethora of examples of student mastery of standards. “Portfolio-based assessment (PBA) is a purposeful collection of student work that represents achievement, progress, growth, and reflection,” (Ziegler & Montplaisir, 2012). Teachers will administer pre and post formative assessments at the beginning and end of each teaching unit throughout the year. The teacher’s goal will be to get students to actively participate in their assessment goals. Feedback and conferencing will be a must in order for students to set learning goals to accomplish throughout the year.

*What Will Learners Do*

Learners, first of all, should be active participants in their education. Learners should be prepared each day to learn. Learners will be expected to complete all homework and assignments in a timely fashion. Learners are expected to ask questions when they need clarification of a learning objective. All students are expected to collaborate respectfully with peers in order to leaner from each other. All learners will be accountable for participating in an active learning climate where they will communicate, argue, and justify their thinking (Kazemi & Stipek, 2008). Learners will also interact with their environment during the school year.

*Role of the Teacher*

Teachers in our school will take on the role of facilitator. They will be required to prepare hands on lessons to help students gain a deep understanding of the learning objectives. Teachers will be required to be continual learners themselves as time passes on to stay with current times. Teachers will need to keep a cheerful attitude, but have a strict classroom management process. Teachers should use up to date data driven instruction methods to plan out curriculum. All teachers will be required to participate in school related functions. It is the teacher’s job to make sure the students learn to be active members of the community.

*Role of Students*

All students will be expected to follow all school rules while attending classes or school sponsored events. Students will be required to attend classes five days a week unless sick or family emergency occurs. Students will be required to act respectfully and diligently. Students will be required to be honest at all times. Students will be expected to learn how to be outstanding members of the community.

**Strategies for Using and Integrating Current and Emerging Technologies**

The students and teachers in our Lower Elementary School will need to use technology to be successful. Our school will be a technology school. There will not be any paper or pencil used in our building. One reason our school will be paper free is that it will help to save money. Going paperless will also help the environment (Aronin, 2013). In order to be a paperless school we will use iPads, activtables, interactive white boards, and student response systems that go with interactive white boards. We plan to use this technology in every single subject in every grade level. Since our school will be paperless it will be mandatory to use all of the technology available for every subject by all students and teachers.

Since our school will be paperless, every student will have access to an iPad while at school. Students will have iPads instead of lap top computers because “they allow for flexibility in the location of where the teaching and learning may occur due to the portability and plethora of educational early childhood apps available at no or low cost” (Aronin, 2013). Students will use iPads for all subject areas. Students will be able to use access quizzes on their iPad that their teacher has already created. Students can take the quiz and turn it into the online drop box. In addition, students will be able to access educational apps such as How Rocket Learned to Read, Shakespeare in Bits, Grammar Up, Math Bingo, etc. Students will also use the iPad as their textbook for all subject areas. Using an iPad as an e reader is much more cost effective than buying textbooks for each individual subject (Miller, 2012).

Each classroom will be equipped with an activtable as well. An activtable is “a touchscreen interactive table with 25 activities that have been mapped to standards” (ActivTable, 2012). An activetable will allow up to 6 students to work on it at once. This table will encourage collaboration between students. One of the things we plan to focus on is building student’s social skills. An activtable will do just that. It will allow the students to work together on a large screen rather than all on their own individual iPads.

The last piece of technology equipment our school will use in an interactive white board. The interactive white board will be used in every classroom for every subject. It will take the place of traditional chalk boards. The interactive white boards will be used to explain concepts to the students. The board will help make the learning more interactive and hands on (Preston, 2008). The interactive white boards also come with student response systems which will be used in classrooms in the place of paper and pencil tests. The student response system will allow students to answer an instructors question on a remote control type device (Füvesi, 2009). This will give the instructor immediate feedback.

**Assessment and Outcomes**

The students at Lower Elementary School will be assessed on their learning using formative and summative assessments. The students will all be working on mastering grade level learning goals and content standards. Each grade level will take formative unit tests upon the completion of a unit. Before taking the unit test students will participate in a goal setting activity and students that meet their goal on the test will receive recognition in their classroom. This will help with motivation. The formative assessments will be given using an interactive response system or on tablet PC. The purpose of using a computer based testing system is so that the teacher can receive immediate feedback and reteach as needed. The formative assessment data will be shared among grade levels to see what content standards or learning goals need to be retaught. Formative assessment allows teachers to “investigate weaknesses and strengths of learners, what they have learned, and what their gaps are” (Kiryakova, 2010). The data will also be shared with parents during parent-teacher conferences. The summative assessment strategy that will be used at Lower Elementary School is an ongoing digital portfolio. Using a portfolio for assessment purposes is “relevant, fair, and useful” (Joosten-ten Brinke, Sluijsmans, & Jochems, 2010). Teachers can add work samples, test data, and other pertinent documents to the portfolio throughout the school year. The purpose of using a digital portfolio is to show growth over an entire school year. This information can be shared with parents to show the growth the child has made from the beginning of the school year to the end. The digital portfolio can also be shared with the child’s teacher the following year to show areas of strength or concern.   
 In the Lower Elementary School knowledge acquisition will be assessed by analyzing the assessment data. Teachers will sit down and analyze their formative unit test scores. If there is a standard that many of the students missed, then that standard should be retaught before moving on. Grade levels can also sit down and analyze data for the same purpose. After each unit test there will be a reteaching or review week to ensure mastery. To assess skills and behaviors the teachers will use observation tools and checklists. Each child will have a checklist of social and behavioral skills that are being assessed that year the teacher will date the checklist when the skill is observed. By “using an observational coding system that defines specific categories of behavior, observers can record the behavior of a child over a period of time” (Warnes, Sheridan, Geske, & Warnes, 2005).  
Technology in Lower Elementary School will play a large role in the assessment process. There will be little to no paper-pencil tests. Assessments will take place using an interactive response system, tablet PC, or laptop computer. This way the teacher can receive immediate feedback and analyze the data right away. The use of technology for testing purposes will apply to all subject areas taught. Through goal setting and immediate feedback from the teacher the students at Lower Elementary School should prove very successful in their assessments.

**Challenges and Limitations**

Numerous of challenges and limitations are associated with the attributes that are presented in our schooling plan. As we developed our school, we had to consider the possible barriers that could hinder the success of the program. Each area contains at least on challenge and limitation. The noted areas are: population, research literature, curriculum, technology, and resources available. Addressing each challenge and limitation as well as providing a sustainable solution, will serve as a pivotal aspect to our schooling plan.

The population of the students within our lower elementary school range from the ages between 4 through 9 years. Social skills are a major development at this age. Students are developing their social skills through self-awareness and socialization with others. A common challenge with this age group is difficulty with self-control. Louise Eckman (2002) stated that, “Children who do not make choices for their own behavior, but instead rely on other children, parents, teachers, or adults to make choices for them, do not learn self-control. These children may follow others’ bad choices and get involved in ridiculing others, taking away others’ things, and not taking responsibility for the consequences of their behavior. They also may listen to others who say negative things about people who may be different due to skin color, race, culture, religion, or disabilities.”. The solution to this would be to teach students immediately about self-control at this age, so that undesirable habits will not arise. Independency is another challenge at this age level, because the school officials are more involved in teaching basic skills which take away from higher level instruction. It is certain developments that come with age progression, so the school’s faculty must nurture each skill and create assignments that are developmentally appropriate and that cater to each.

Research literature will not always support the type of school that we planned. There are some criticisms of conducting a curriculum that is fully technology based. The opposing party believes that technology programs will need heavy funding in order to have the newest technologies. They also believe that students are being deprived of basic skills that generations in the past needed in order to be functional in society. Cennamo, Ross and Carter (2010) stated that, “Technologies change at lightning speed, making it difficult to keep up-to-date.”. Lightfoot (2009) notes that “once children are heavily exposed to technology alone (not to mention given tweeting and blogging lesson in class), they will lose touch with their basic skills like communication with depth, for example. Using Twitter is naïve as per some authorities because it steals the focus from more important activities which pupils were taught a generation ago.”. Our school will tackle both of these issues by creating a budget control that allows our school to purchase many of the newest technologies and maintaining an active grant writing program.

Students should be challenged in all academic areas. When certain subjects are not taught, students are at a disadvantage, because they are missing out on many onset skills. “Schools who eliminate special area classes including arts education classes (dance, music, theatre arts, and visual arts), foreign language, and physical education are not implementing a balanced curriculum.” (Lee, 2003).

Creating our technology based school will bring on challenges with technology itself. Teachers will be facilitators and they must learn to transition from being in the front of the class to a resource that will walk around the class to observe different student activities. “With technology education activities, the students have the vision for their finished products, and the teacher facilitates or guides them through a process of learning through experimentation” (Lenz and Boe, 2002).

Technology education content can sometimes be intimidating because we have limited knowledge and training. We are starting a school for bottom up during an uncommon situation. There are not many resources that support this instance. We can begin to establish research by conducting many studies that reveals the effectiveness of the methods in which we use in our school. This will aid us in the future as well as other institutions that will be forming.

**Expanding Adoption, Adaptation and Diffusion**

As we developed our school plan, we referred to the readings that we did throughout this course as well as other literatures that offered theories and explanations. There are several theories that provide examples on how an idea is successful and how an idea inherit acceptance and gravitates toward a widespread adoption among a group of individuals. Our plan was to utilize the knowledge that we gained during our course readings and outside literary works as a platform of creating our schooling plan. The three people that are responsible for a majority of our schooling plan are Malcolm Gladwell, Everett Rogers, and James. B. Ellsworth. Combining their ideas and researching new ones provided us with strong evidence and reasoning for each aspect of our schooling plan.

Malcolm Gladwell’s, *The Tipping Point*, introduces the terms, “mavens”, “salesmen”, and “connectors”. Mavens are referred to as “information specialists” and he describes salesmen as “persuaders” (Gladwell, 2000). In our school, teachers will act as mavens and salesmen, because they are the skilled professionals that will connect the students and other faculty members to the information and convince them of the worthiness of each component. The connector is an individual that connects the people from different social systems (Gladwell, 2000). Our school Principals and administrators will serve as the connectors, because they will share our school’s ideas with members of our local school district as well as other school throughout the state(s). Another concept that Gladwell introduced was “stickiness factor”. The Stickiness factor involves how effective an idea or product stays in the mind of the potential viewer or consumer (Gladwell, 2000). We are using our technology based approach to promote the “stickiness” in our student population’s minds in hopes that they will remember the content more efficiently.

Everett Rogers (1995) defined diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 35). Rogers perception of an innovation is as any new idea, practice, or object considered new to an individual (Rogers, 1995). Our school will be full of innovations, because everyone is learning these technologies for the first time. He explained that "a technology is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome" (Rogers, 1995, p. 35). Our teachers will deliver information with the rationale that technology is to be used to deliver information instead of just letting it serve as equipment. This practice will satisfy Rogers’s belief on the desired role of technology in the classroom.

James B. Ellsworth's overall view can be summarized with the following: a change agent wishes to communicate an innovation to an intended adopter. This is accomplished using a change process, which establishes a channel through the change environment. However, this environment also contains resistance that can disrupt the change process or distort how the innovation appears to the intended adopter (Ellsworth, p. 26). This applies to our school plan, because school officials and corporations (change agents) will incorporate technology use onto teachers (intended adopters), but if the teachers are unwilling or unable to use technology effectively, then the entire innovation is in danger. Our plan requires that all teachers receive mandatory training on each technological device and its implications in the classroom. Also, assessments will be performed on the teachers’ activities and technology use will be one of the major criteria.

Aside from Gladwell, Rogers, and Ellsworth, our schooling plan also included ideas from Larry Cuban. Cuban expressed his views of technology in schools by stating: “Before we can get the education revolution rolling, we need to recognize that our public schools are low-tech institutions in a high-tech society. The same changes that have brought cataclysmic change to every facet of business can improve the way we teach students and teachers. And it can also improve the efficiency and effectiveness of how we run our schools.” (Cuban, 2009). There are many books by Larry Cuban that discuss the role of technology in schools, but this passage validates our reasoning for choosing to develop a technology based school plan, because we want to better prepare our students for the technological workforce. Students are now encouraged to be more creative than in the traditional classroom setting. Cuban speaks on this in another article, “Open classrooms’ focus on students’ “learning by doing” resonated with those who believed that America’s formal, teacher-led classrooms were crushing students’ creativity.” (Cuban, 2004).

**Conclusion**

Our group was given the task of building a school to house lower elementary students in grades prekindergarten through third grade. Our school is located in a rural town of Georgia. There are 1,892 enrolled on our campus. As a team we have developed a strict curriculum and teaching system in order to have a positive effect on our students’ achievement. We have developed a teaching philosophy inspired by cognitive development and behaviorism. Our teachers implement technology into every aspect of their classroom environment. Numerous of challenges and limitations are associated with the attributes that are presented in our schooling plan. As we developed our school, we had to consider the possible barriers that could hinder the success of the program. As we developed our school plan, we referred to the readings that we did throughout this course as well as other literatures that offered theories and explanations. There are several theories that provide examples on how an idea is successful and how an idea inherit acceptance and gravitates toward a widespread adoption among a group of individuals. Our plan was to utilize the knowledge that we gained during our course readings and outside literary works as a platform of creating our schooling plan.

**References**

ActivTable. (2012). *Children's technology review, 20*(4), 24.

Aronin, S., & Floyd, K. K. (2013). Using an iPad in inclusive preschool classrooms to introduce STEM concepts. *Teaching Exceptional Children, 45*(4), 34-39.

Artunian, J. (2010). A pathway to paperless. *T H E Journal, 37*(9), 16-18

Ashdown, D. M., & Bernard, M. E. (2012). Can explicit instruction in social and emotional

learning skills benefit the social-emotional development, well-being, and academic achievement of young children. *Early Childhood Education Journal, 39*(6), 397-405. doi: 10.1007/s10643-011-0481-x

Browning Wright, D. (n.d.). Changing children's behavior in school. Retrieved from http://www.greatschools.org/parenting/behavior-discipline/711-helping-change-behavior.gs

Callaghan , G., & Madelaine, A. (2012). Leveling the playing field for kindergarten entry: Research implications for preschool early literacy instruction. . *Australasian Journal of Early Childhood, 37*(1), 13-23. Retrieved from <http://ehis.ebscohost.com/eds/pdfviewer/pdfviewer?sid=30d5f6c4-487d-4768-bebd-c5fe5ccea0df@sessionmgr4&vid=8&hid=15>

Carlson, Neil, & et al. (2010). Psychology the Science of Behavior. Pearson. Canada, United States of America.

Cennamo, K., Ertmer, P., & Ross, J. (2010). *Technology integration for meaningful*

*classroom use.* Belmont,CA: Cengage Learning.

Cuban, L. (2004). The open classroom. *Education Next* , *4*(2),

Cuban, L. (2009). *Oversold and underused: Computers in the classroom*. Cambridge:

Harvard University Press.

Dunne, F. (1983). Good government vs. self-government: Educational control in rural America. *Phi Delta Kappan, 65*(4),252-256.

Eckman, L. (2002). Teaching young children self-control skills:. *National Association*

*of School Psychologists*, 1.

Ellsworth, J. (2000). *Surviving change: A survey of educational change models*. New

york: ERIC Clearinghouse on Information & Technology

Joosten-ten Brinke, D., Sluijsmans, D. M., & Jochems, W. M. (2010). Assessors' approaches to portfolio assessment in assessment of prior learning procedures. *Assessment & Evaluation in Higher Education,* 59-74.

Gladwell, M. (2000). *The tipping point: how little things can make a big difference*.

Boston: Little,Brown.

Hyson, M., & Taylor, J. (2011). Caring about caring: What adults can do to promote young children's prosocial skills. *Young Children, 66*(4), 74-83. Retrieved from <http://www.naeyc.org/files/yc/file/201107/CaringAboutCaring_Hyson_OnlineJuly2011.pdf>

Kazemi, E., & Stipek, D. (2008). Promoting conceptual thinking in four upper-elementary mathematics classrooms. Journal of Education, 189(1/2), 123-137.

Kiryakova, G. (2010). Using information technologies to carry out formative assessment. *Trakia Journal of Sciences*, 11-20.

Lee, H. (2003). The balanced curriculum. *NC Department of Public Instruction*, 11.

Lentz, K., & Boe, N. (2004). Implementing technology in elementary. *Technology*

*and Children*, 19.

Lightfoot, L. (2009). Tweeting vs reading. *The*

*Independent*, 3.

McLeod, S. A. (2012). Piaget | Cognitive Theory. Simply Psychology. Retrieved from <http://www.simplypsychology.org/piaget.html>

Miller, W. (2012). Iteaching and iearning. *Library Technology Reports, 48*(8), 54-59.

Mohammad, M., & Mohammad, H. (2012). Computer integration into the early childhood curriculum. *Education, 133*(1), 97-116. Retrieved from <https://ehis.ebscohost.com/eds/detail?vid=9&sid=30d5f6c4-487d-4768-bebd-c5fe5ccea0df@sessionmgr4&hid=104&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ>

Piaget, J., & Inhelder, B. (1973). Memory and intelligence. London: Routledge and Kegan Paul

Office of Management and Budget (2000). Standards for defining metropolitan and

metropolitan statistical areas; notice. *Federal Register* (65) No. 249.

Preston, C., & Mowbray, L. (2008). Use of SMART Boards for teaching, learning and assessment in kindergarten science. *Teaching Science: The Journal Of The Australian Science Teachers Association, 54*(2), 50-53.

Rogers, E. (2003). *Diffusion of innovations*. (5th ed.). New York: Simon and

Schuster.

Sheridan, S., & Williams, P. (2011). Developing individual goals, sharing goals, and the goals of others: dimensions of constructive competition in learning contexts.   
Scandinavian Journal of Educational Research, 55(2), 145-164.

United States Department of Health and Human Services. (2011). *The health*

*and well-being of children in rural areas: A portrait of the nation 2007.*

Warnes, E. D., Sheridan, S. M., Geske, J., & Warnes, W. A. (2005). A contextual approach to the assessment of social skills: Identifying meaningful behaviors for social competence*. Psychology in the Schools*, 173-187.