Applying Research on Effective Schooling in the Early Childhood Classroom

(From the Perspective of a K-12 Teacher)

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### Abstract

In the early childhood classroom, specifically in a Title I school, there are certain strategies which teachers use in order to assist children as they learn at their highest potential. Selected from an analysis of 800 meta-analyses by Hattie (as cited in Huitt, Huitt, Monetti, & Hummel, 2009), there are three major variables, and three related variables, to apply in these classroom. These classroom teaching strategies are based on past theories and research from such educational mentors as Comenius, Montessori, Froebel, Locke, and Rousseau (as cited in Platz & Arellano, 2011). Practical suggestions for these classrooms should be given for teachers to implement, in addition to methods which can track the progress of their students. Combining application ideas with tracking methods, and the research behind them, will create an early childhood classroom full of effective teaching.

Applying Research on Effective Schooling in the Early Childhood Classroom

Educators in the early childhood classroom must consider past research when choosing teaching strategies to implement in their own classrooms. They also have to think about the background of the children in their classroom, so the children are reached at levels that allow them to find their greatest potential in learning each objective and encourage them to continue a life full of learning (Raths, 2002). The teaching strategies should be used throughout each day in a way that is purposeful for the development of each student. Once the strategies are chosen and formed to use in the classroom, the educator should also create a way to track the progress of the children within the various strategies. Effective teaching comes to a classroom when strategies are applied based on research, past experience, understanding of the community of students, and honest evaluation (Huitt, Huitt, Monetti, & Hummel, 2009).

As previously mentioned, it is critical to understand the community, and the background, of the students in the classroom, before a plan of action is formed. This specific plan is designed for Kindergarten classrooms in a small school, which is a part of a large district of forty-seven elementary, plus middle, and high schools. It is a Title I school, where over 90% of the students are on the federal lunch plan for free or reduced lunches (NEISD, 2012b). Almost every student has a Hispanic ethnicity and many of the students' family members speak Spanish as their first language. The majority of the students begin Kindergarten without any prior schooling, as the children are home with parents instead of attending pre-schools or child care centers of any kind (Texas Education Agency, 2011). Due to socio-economic status of the families, the need for English-as-a-Second-Language training, and the lack of academic background knowledge, many of the students are academically "at-risk." It is imperative to create early childhood classrooms

full of effective teaching and learning. Once an action plan is created, applied, and evaluated in this school, there is a potential to share the plan with seven other schools in the district with similar demographics, and even alter parts of the plan to implement the teaching strategies in the other thirteen Title I schools within the district (NEISD, 2012a).

#### **Classroom-Based Action Plan**

A foundation for education is built in the first years of a child's schooling. Kindergarten teachers realize this truth and work to create an experience that helps children develop cognitively, socially, emotionally, and behaviorally (Platz and Arellano, 2011). By touching each part of a child's development, the early childhood educators are confident they can create this foundation, in cooperation with other staff members, family members, and the students. The creation of a Kindergarten classroom has to include the best practices for a specific group of students. It also needs teaching strategies that have been demonstrated to be effective and beneficial.

# **Investigating Best Practices**

Research from Huitt et al. (2009) demonstrated that schools with high numbers of students on the federal lunch plan, who perform academically at similar levels to schools with a lower number of students on the federal lunch plan, are actually offering their students a more effective place for learning. The teachers in these schools use strategies that are ideal for the students' learning; they are based on research and experience to assist in the children's development. Much stimulation is needed in these classrooms which may be new to the students. The stimulation is for their brain activity, sensory awareness, and motor skills and is

given through hands-on, active learning activities which apply to various objectives in the standards and curriculum (Crosnoe, Wirth, Pianta, Leventhal, & Pierce, 2010).

### Variables for Action Plan

There is a multitude of teaching strategies which a Kindergarten teacher can use to assist their students in understanding the objectives of the grade level curriculum. For this action plan, considering the classrooms in the description at the beginning of the piece, there are specific strategies that should be implemented for effective schooling. Hattie (as cited in Huitt et al., 2009) completed research to find variables that were effective in the various settings of schools. One setting, which fits for this action plan, was that of the Kindergarten through grade twelve classrooms. Based on research and classroom experience, three variables were selected, along with three supplementary variables, which would benefit the children and their long-term development. All of the variables should be used in conjunction with one another, rather than in isolation.

Teaching for skills in "problem solving" is one strategy to implement in the Kindergarten classroom. In Hattie's (as cited in Huitt et al., 2009) research, this variable was noted as a huge factor in effective schooling (d= 0.61). It is critical to teach young children how to question their learning activities, evaluate their experience, search for more answers, and work through problems that arise. A study with young children in Thailand noticed that the children actually enjoyed the science learning center the most out of all centers offered and this was the area in which they had the most opportunity to build their problem solving skills. The teachers taught the necessary skills for the children to problem solve on their own. Though the teachers still guided them through the experiences, the children were the ones who were problem solving with

their peers, which is a skill they will use throughout life (Smanmark, Sarnrattana, & Saikaew, 2011).

The next variable to discuss and put in place in these Kindergarten classrooms, is that of "cooperative learning." This held a rank of d= 0.61 in Hattie's (Huitt et al., 2009) research and though it was not listed at the top of the list in the teaching strategies, the concept follows the idea behind another large factor, the variable of "student engagement." There are many educational researchers, such as Locke, Comenius, Froebel, Montessori, who discussed the value of children playing with peers as a part of their learning (Platz & Arellano, 2011). These individuals impacted education at different periods in history, yet the message of cooperative learning never wavered. When children work together to build their knowledge, they teach one another their individual schemas at their own levels. Piaget (as cited in Driscoll, 2005) also discussed the need for children to work through cooperation, to increase their knowledge. This is noticed in classrooms when a teacher observes children working in a learning center, that has various activities for letter recognition, and one child helps the second child find the letters in his name. This type of cooperative learning continues for children in other learning activities that are important to their development.

Finally, the variable of "matching styles of learning" (d= 0.41) is critical for teachers to use as a strategy in their classrooms (Hattie, as cited in Huitt et al., 2009). Gardner (as cited in BBC Horizon, 2007) explained the importance of teachers recognizing the multiple intelligences of students. Each person has different areas in which they find success; it may be mathematical intellect, skills in language, working with hands, music abilities, or work in the fine arts.

Teachers should assess the learning styles of their students and design learning centers which

incorporate the curriculum standards, with the various learning styles. The kindergarten students can then choose to learn in their preferred learning style or try a new style. Froebel (as cited in Platz & Arellano, 2011), recognized as the "father of Kindergarten", even developed games, songs, and other learning activities which encouraged young children to work together in their learning. Though this was many years before Gardner's research, Froebel experienced a need to reach children in their personal areas of interest to promote their development. In the school mentioned for this action plan, the students will benefit from the exposure to multiple styles of learning that allow them to grow from a single, preferred style, as the children do not have many varied, learning opportunities in their homes (Crosnoe et al., 2010).

A supplemental variable, which should be used with each of the previously discussed variables, is offering "feedback" (d= 0.73) as a teaching strategy (Hattie, as cited in Huitt et al., 2009). This plays a large role in effective learning. Children need to receive regular feedback that encourages their development. Feedback lets people know the areas where they excel and those where they need to improve. For young children, it is important to bring the comments in a way that they can understand and use to grow. Hattie and Timperley (2007) noted the pointers should combine easily with the instruction so the child can work on the objectives in the current curriculum. During cooperative learning, comments should be made which encourage students in their social skills and the ways the children are helping one another in their learning. Problem solving requires observations and explanations of how the child can implement more, or deeper, questioning. Feedback also helps with the various styles of learning when the teacher explains to the student how they are improving in a style of learning they already appreciate and how they

can step out of their comfort zone to try something new. Overall, feedback gives children an understanding of their successes and struggles.

Another variable to use with the others, is setting "goals" (d= 0.56) within the learning (Hattie, as cited in Huitt et al., 2009). The goals that students set on their own, and those set with the guidance of the teacher, should be used in cooperative learning, problem solving, and with every learning style. The idea is that the goal is set for the learning standard, and then applied throughout the school day. Goals need to be created at different levels; it is beneficial to have short and long-term goals. Some goals may seem hard to reach, but this brings more excitement and satisfaction in the end. By setting goals, children are usually more dedicated and ready to work toward the desired outcome (Hattie & Timperley, 2007).

Last in the action plan for this school, the teachers should always consider the "teacherstudent relationships" (d= 0.72) to create an effective learning environment for the children (Hattie, as cited in Huitt et al., 2009). More learning occurs when the teacher and students have respectful relationships with one another. When students and teachers share in feedback, cooperative learning, problem solving, and goal creation, they build their relationship. In addition, it is valuable to teachers to get to know the families of their students. Knowing a student's background and more about their interests helps a teacher match their learning styles (Hattie & Timperley, 2007). When working with students in a community such as described in the opening, it is essential to know things about the home life of the students. They may live in a traditional home or a home with multiple generations. The parents may have a college education or they may not have finished high school. This information helps a teacher understand how to

better reach the student and create a learning environment that is effective for their development (Crosnoe, Wirth, Pianta, Leventhal, & Pierce, 2010).

Once the various teaching strategies are implemented, the teachers need to evaluate the usage of each one and how they impact the development of each child. Though research went into the action plan, each set of students is different and continual evaluation should be utilized to bring more effective learning to the students on a regular basis. It is beneficial for teachers to track the strategies so their evaluations are accurate and complete.

## **Tracking Methods**

Methods should be applied to record and follow the progress of the students in regard to the mentioned teaching strategies. This allows teachers to note the growth of their students and also evaluate their teaching. If strategies need to be altered or completely changed, it should be done based on a data-driven need.

Class meetings are an excellent way to observe and collect information about the development of the children. During these moments of conversation, the teacher finds out more about what the children are learning, aside from the formal and other informal assessments which take place during learning centers. Additionally, the conversations allow a teacher to discover the likes and dislikes of the students, in regards to the teaching strategies chosen for this action plan. This offers useful information for a teacher when planning to continue or alter teaching strategies in the classroom (Williams, Landry, Anthony, Swank, & Crawford, 2012).

Various forms of checklists are also beneficial in tracking the usage, and progress, of the given strategies. This is especially useful for teachers in their self-reflections. Williams et al. (2012) described two types of checklists, the "Preschool Classroom Environment Checklist" and

the "School Readiness Certification System", for teachers to use in progress monitoring. In each case, the teachers are able to evaluate and record the situations in their classrooms, so they can make data-driven decisions for future planning of lessons, classroom design, and learning centers.

Overall, it is important to keep all tracking information on an internet or computer program which can be saved and accessed from different computers. Through these programs, a teacher can look at small pieces of the materials for specific data. Or the teacher can view large, general data and assess the full impact of the teaching strategies. This also makes a way for multiple people to see the information if proper access is given to those people. For instance, it may benefit special education teachers or administrators to view the information, in addition to the classroom teacher (Williams et al., 2012).

Specific teaching strategies should be applied in early childhood classrooms, to purposefully bring each student effective learning opportunities. To select the strategies, it is essential to identify characteristics of the students and the community. The selection process also should include knowledge of research which is relevant to the age level of the students (Huitt et al., 2009). Using the strategies should bring more learning to each child, but the levels of learning are only discovered through proper evaluations and record keeping of the assessments. After evaluations are noted, the teachers can make choices about future usage of the strategies or ways to alter the strategies to reach the children in stronger ways (Williams et al., 2012).

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