

# *The Field Experience Journal*

*Volume 7 Spring 2011*

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**Cover:** *Zuni Bear Fetish*

According to Zuni mythology, the Bear is the Guardian of the West and has the power to heal and transform human passions into true wisdom. The Bear is invaluable when facing change and transition or resolving conflict.

Bear reminds us that one of the great powers we have is the power of solitude and introspection. Bear can help you realize this power and use it during those times in life when the change created by events feels overwhelming.

# *The Field Experience Journal*

## ***Submission Guidelines:***

1. Manuscripts should be no more than 15 pages of narrative (excluding references, tables, and appendices), using the latest APA style, and double-spaced on one side of 8-1/2 by 11-inch paper with justified margins.
2. Manuscripts must be submitted electronically via email attachment to [kim.creasy@sru.edu](mailto:kim.creasy@sru.edu) containing name, position, place of employment, mailing address, phone number, e-mail address, and a 2-3 sentence description of background and experience for each author. The title of the article should also appear on page 1 of the manuscript, but do not include the author(s) name(s).
3. Pages should be numbered consecutively including the bibliography, but the author's name should not appear on the manuscript itself.
4. Charts or illustrative material will be accepted if space permits. Such materials must be camera-ready. Photographs will usually not be used unless they are black and white and of high quality.
5. Authors are expected to take full responsibility for the accuracy of the content in their articles, including references, quotations, tables, and figures. The editor reserves the right to edit articles accepted for publication.
6. Authors of manuscripts accepted for publication are expected to make a presentation about their article at the next National Student Teaching Supervision Conference.
7. There is no remuneration for articles accepted for publication, but each author will be mailed a complimentary copy of the journal. There is no fee for the review of the manuscript.

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## From the Editor

Dear Readers of *The Field Experience Journal*:

This Spring 2011 edition of *The Field Experience Journal* features a Yakima Time Ball on the cover. Much of the Yakima tribe's history was passed down from generation to generation by the women of the tribe using an oral tradition known as the time ball. This creation by a new bride used hemp twine to record the life history of a family beginning with courtship. They tied different knots into the twine for days and weeks and added special beads for significant events.

This edition features five articles relevant to all of us actively involved in teacher preparation and school improvement. The lead article, "The Cooperating Teacher: What Do They Need to Know?" composed by Camille Ramsey, M.S. and Dr. Sean Bulger of West Virginia University examines the impact a cooperating teacher possesses on the quality of a culminating field experience. This paper provides a brief review of literature related to cooperating teacher selection and preparation to generate recommendations for accomplishing programmatic functions in an effective manner.

"The Impact of Teacher Quality on Preschool Mathematics Instruction" written by Dr. Jeff Leffler and Dr. Sallie Harper of Mississippi State University provides perspectives of the impact of the standards movement and the pressure this movement places on early educators to abandon developmentally appropriate practices.

Dr. Patricia Scheffler and Ms. Jessica Hodge of Grove City College share the impact of teacher candidate training with the Positive Behavior Support model and observable behaviors of learners in a variety of student teaching placements in their article titled "Positive Behavioral Support: Pre-Service Teachers Support Pro-Social Behavior in Preschool Classrooms".

Dr. Thomas J.P. Brady, in "Reforming Teacher Education Programs Through the Use of Electronic Portfolios", describes the plan and implementation of the scaffolding of support needed to use the electronic portfolio system within the Accelerated Post Baccalaureate program at Bridgewater State College.

This volume's final article focuses on the variety of print experiences to which young children are exposed and the impact of understanding advanced concepts about print that develops from this exposure. The article titled, "The Teaching Power in Environmental Print" is written by Dr. Kimberly Triplett and Dr. Sallie Harper of Mississippi State University.

Finally, my thanks to those who have contributed their manuscripts for our consideration and to our reviewers for their time and expertise.

Kim L. Creasy

# **The Cooperating Teacher: What Do They Need to Know?**

*Camille Ramsey and Sean Bulger*

*West Virginia University*

## Abstract

Student teaching is commonly recognized as the most valuable experience that pre-service student teachers have within a teacher education program. The individual with the greatest potential to positively impact the quality of that culminating field placement is the cooperating teacher. Unfortunately, there is some evidence that cooperating teachers often receive very little formal mentorship training from the participating teacher education program. This lack of training can negatively influence the cooperating teacher's readiness to facilitate a meaningful and productive student teaching experience. The purpose of this paper is to provide a brief review of the literature related to cooperating teacher selection and preparation and to generate practical recommendations for accomplishing these essential programmatic functions in a more effective manner.

Student teaching maintains a long-standing reputation as the most valuable experience that pre-service teachers have within the context of the undergraduate teacher education program (Griffin, 1989; Koerner, 1992; Turney et al., 1982). The cooperating teacher is often considered to be the individual with the greatest potential to positively impact the quality of that important culminating field experience due to their daily interactions with the student teacher. Despite the evidence highlighting the importance of the student teaching process and the central role assumed by the cooperating teacher, most teacher education programs expend limited discretionary effort or resources in the selection and preparation of their cooperating teachers. Unfortunately, the methods used to recruit and select cooperating teachers at many colleges and universities lack sufficient rigor with teacher education programs providing few, if any, continuing professional development opportunities for their cooperating teachers. These factors interact to negatively influence the cooperating teacher's readiness to facilitate a meaningful and productive student teaching experience. The purpose of this paper is to provide a brief review of the literature related to cooperating teacher selection and preparation and to generate practical recommendations for accomplishing these essential programmatic functions in a more effective manner. The following sections are included in the manuscript: (a) an overview of the student teaching process; (b) issues pertaining to cooperating teacher selection and preparation, and; (c) related recommendations for program improvement.

### The Student Teaching Process

The student teaching process encompasses “planning, organizing, and providing instruction to students full time over a period of weeks, typically occurs at or near the end of a pre-service teacher’s program” (McNergney & Herbert, 2001, p. 23). Throughout the student teaching experience, multiple educational professionals collaborate to facilitate this critical transitional

process (see Table 1). These educational professionals include the university supervisor, cooperating teacher, and school administrators. Together with the student teacher, the university supervisor and cooperating teacher form what is commonly referred to as the student teaching triad. The primary goal of the triad is to ensure the successful completion of the student teaching placement from multiple perspectives (e.g., teaching certification, undergraduate degree requirements, and school expectations for quality instruction). Neide (1996) described the significance of the triad in the following quote, “under the direction of a cooperating teacher, professional mentor, or university faculty member, novice teachers can learn to implement sound pedagogical techniques that will equip them for successful careers” (p. 14).

Table 1. Overview of the Student Teaching Process

| Student Teaching Phase  | Key Characteristics   |
|-------------------------|---|
| Observing and assisting | <ul style="list-style-type: none"> <li>• Explore the physical school environment and meet students, faculty, administrators, and parents</li> <li>• Observe instructional organization, classroom management, and non-instructional duties</li> <li>• Assist cooperating teacher as needed while learning school policies and procedures</li> </ul>                                       |
| Team teaching           | <ul style="list-style-type: none"> <li>• Assume direct responsibility for selected elements of instructional planning, classroom management, teaching, and assessing student learning</li> <li>• Teach periodic lessons (in part or whole) to small and/or large groups of students in collaboration with the cooperating teacher</li> </ul>  |
| Independent teaching    | <ul style="list-style-type: none"> <li>• Take on full responsibility for the teaching-learning environment when deemed appropriate by the cooperating teacher</li> <li>• Engage in regular self-reflection regarding teacher effectiveness and student learning</li> <li>• Help to transition the classroom back to the cooperating teacher in the final week of the placement</li> </ul> |

The members of the student teaching triad perform various roles and responsibilities. The key role of the student teacher is to apply the knowledge and pedagogical skills that have been acquired throughout the teacher preparation program. The student teacher's responsibilities include, but are not limited to, the following: (a) conform to the standards of professional conduct established by college or university personnel and local school administrators; (b) restrict personal activities, like part-time employment, in order to insure the quality of the student teaching experience; (c) demonstrate reliability in attendance and performance of assigned duties including those of a non-instructional nature (e.g., serving on committees, attending faculty meetings, parent/teacher conferences, and other extracurricular activities); (d) become familiar with school resources, policies, and procedures (e.g., instructional technology, library, health services, food services personnel, school resource specialists, community resources, student organizations, emergency procedures); and (e) meet all classroom responsibilities related to instructional planning, teaching, classroom management, and assessment.

The university supervisor, a representative from the student teacher's college or university, has the role of supporting the cooperating teacher and student teacher throughout the field placement. The university supervisor is responsible for the formative and summative evaluation of student teacher performance based on periodic observations and consultations. The university supervisor's responsibilities are numerous and also include the following: (a) serve as an intermediary between the university and the school; (b) conduct conferences and/or seminars for student teachers; (c) observe the student teacher on multiple occasions for the purpose of prescriptive feedback and performance appraisal; and (d) collect, manage, and analyze data related to student teacher behavior, learner behavior, quality of the teaching-learning environment, and achievement of educational outcomes.



The cooperating teacher, however, may play the most critical role in administering the student teaching process. According to Copas (1984) “the job of the cooperating teacher is to help the student teacher develop a deep and meaningful concept of teaching, to help the student teacher analyze the many facets of teaching, to provide the student teacher with sources and resources, and to encourage the student teacher’s unique teaching behavior” (p. 50). The cooperating teacher’s influence on the student teacher is compounded by the frequency and immediacy of their interactions. Accordingly, the cooperating teacher needs to effectively bridge the gap between the content knowledge, pedagogical knowledge, and pedagogical content knowledge, learned throughout the teacher education curriculum and its actual application in an authentic teaching-learning environment. The cooperating teacher should also understand, value, and reinforce the teacher education program goals and objectives. Furthermore, the cooperating teacher needs to continue developing and refining the clinical supervision skills needed to systematically observe the student teacher and provide feedback that produces meaningful improvements in teaching behavior.

Despite the perceived importance of the student teaching experience, teacher education programs invest limited resources in the preparation of their cooperating teachers (Grimmett & Ratzlaff, 1986). This lack of investment is counterintuitive given the central role that cooperating teachers play in student teaching, the signature feature of the teacher education curriculum. As an end result, cooperating teachers may lack the formal preparation required to effectively supervise student teachers. These findings do not bode well for the process of student teaching and teacher education in general. If the cooperating teacher, who maintains such a highly visible role in the student teaching process, lacks the prerequisite skills sets, then by default we must question the extent to which we are preparing our beginning teachers?

## Cooperating Teacher Selection and Preparation

Selection of the cooperating teacher must not be taken lightly as we have already discussed the importance of the student teaching process as a culminating field experience. Copas (1984) argued that, “selection and preparation of the best cooperating teachers available must receive the attention of educational institutions that require student teaching as part of their teacher education preparation programs” (p. 49). Unfortunately, teacher education programs often neglect this responsibility and cooperating teachers are selected subjectively using no formal criteria. This inappropriate practice can result in numerous problems for the student teacher, the cooperating teacher, and the university supervisor.

With regard to the recruitment and selection of cooperating teachers, Blocker and Swetnam (1995) reiterated that the cooperating teacher remains the single most influential factor during the student teaching experience. Despite the apparent consensus regarding their importance, the cooperating teacher selection process often lacks sufficient rigor (Blocker & Swetnam, 1995). Copas (1984) provided further evidence of the inadequacy of cooperating teacher selection and stated that the “criteria used by administrators in selecting cooperating teachers are often unrelated to the goals of the teacher education program and are of a pragmatic rather than clinical nature” (p. 49). For example, the following sample criteria are routinely applied to the selection of cooperating teachers: (a) three years teaching experience (at minimum); (b) recommended by a school principal or other administrator; and (c) agree to serve as a mentor and cooperating teacher to a student teacher. In the area of cooperating teacher selection, Zemek (2008) noted that personal and professional relationships between in-service teachers and college faculty are often used when selecting cooperating teachers. Furthermore, evaluations of previous student teacher supervision experiences (positive evaluations) are sometimes used as selection criteria (Blocker & Swetnam,

1995; Zemek 2008). Brodbelt (1980) maintained that these types of selection criteria make it “far too easy to become a supervising teacher. One has only needed the satisfactory teaching recommendation by a principal and several years of teaching experience to be selected as a supervising teacher. Too often college and university training programs have accepted readily any teacher as a supervisor.”

This apparent lack of selectivity has serious implications for the student teaching enterprise. Copas (1984) concluded that student teachers were aware of and concerned with the behaviors that cooperating teachers exhibited and thought that these behaviors affected them as well as the children in their classroom. The student teachers also understood that the cooperating teacher had to know certain specifics concerning classroom management, discipline, and that they served as professional role models. It should therefore be stated that cooperating teachers must be effective practitioners and demonstrate competence in teaching as a pre-requisite to their recruitment and selection.

The selection of highly skilled practitioners does not in and of itself guarantee their proficiency as cooperating teachers though. While it is a widely held presumption that effective teachers possess the skills sets needed to effectively supervise student teachers; the related literature discounts this notion. Student teachers often find themselves in difficult situations where they require some measure of instructional support but the cooperating teacher has received little formal preparation in clinical supervision or mentoring. Furthermore, the university supervisor, who presumably has formal preparation in these areas, is not readily available and maintains limited knowledge of the specific teaching-learning environment. Orland (2001) argued that “most cooperating teachers do not have access to training related to mentoring successful student

teachers. Learning to become a mentor is a conscious process of induction into a different teaching context and does not emerge naturally from being a good teacher of children” (p. 75).

The limited available evidence suggests that teacher education programs are not providing cooperating teachers with the formal preparation needed to perform their essential functions (Zemek, 2008). Zemek investigated the selection and preparation of cooperating teachers within music teacher education. In these programmatic contexts cooperating teacher preparation was limited to the use of program handbooks, and periodic conferences between cooperating teachers and university supervisors including occasional workshops. Preparation was more restricted if the cooperating teacher was known to the program and/or had previous interactions with faculty members. While the problems associated with the use of arbitrarily selected and untrained cooperating teachers are numerous, three key issues will be examined in detail:

1. Lack of adherence to and reinforcement of teacher education programmatic goals.
2. Subjective, rather than objective, supervision.
3. Ineffective feedback.

One problematic issue that can arise due to lack of formal preparation is the fact that cooperating teachers do not always reinforce programmatic goals of the college or university they are working with. For example, Coulon (1991) attempted to identify the percentage of undergraduate physical education teacher education (PETE) program goals that were addressed by cooperating teachers during the post teaching conferences held between the cooperating teacher and the student teacher, as well as the type of verbal interactions that occurred. A significant number of PETE program goals were being addressed during the observed post teaching conferences but the feedback was considered to be less than optimal. Additionally, the cooperating teacher at times questioned the numerous student teaching requirements established by the

representative program and often suggested substitutions or replacement activities. The cooperating teachers in this study emphasized the need for a well managed and organized class with high amounts of student activity and appropriate pupil behavior. Cooperating teacher feedback reflected their focus on a “happy, busy, good” classroom rather than actual student learning. In order for the programmatic goals to be conveyed to the student teachers in an appropriate fashion, Coulon (1991) suggested that “programs need to set priorities for the training of cooperating teachers so program goals are not only addressed during CT-ST [cooperating teacher-student teacher] interaction, but also that the goals are achieved” (p. 69). This concern could be addressed through university sponsored professional development opportunities for the cooperating teacher.

A second problem with untrained cooperating teachers is the greater likelihood that they do not know how to conduct objective, systematic, and sequential supervision of student teachers. Supervision is a critical aspect of the student teaching experience that should be provided throughout the field experience by both university supervisors and cooperating teachers. Church (1976) found that “although the cooperating teachers are usually well trained in their special subjects, there is often a lack of awareness of sound supervision principles” (p. 27). With the understanding that cooperating teachers provide most student teaching supervision regarding instruction, planning, management, and assessment, it is imperative that they be able to perform all supervisory functions in an effective manner (e.g., pre- and post-observation consultations, systematic observation of teacher and student behavior, feedback concerning lesson strengths and weaknesses, development of goals and strategies for improvement).

Research supports that cooperating teachers with specific training are better at giving feedback to teacher candidates and this positively influences their selected communication

strategies and skills. Untrained cooperating teachers give minimal feedback, hold fewer conferences, and spend little time actually observing their student teachers (Niede, 1996; Tannehill & Zakrajsek, 1988). Many cooperating teachers view sound classroom management and often low expectations as success in student teaching, while “risk taking, reflection, investigation, and problem solving are forsaken for imitation of and subservience to the supervisor” (Neide, 1996, p. 14). Given these rather serious concerns associated with the student teaching experience, it is essential that teacher education programs take a critical look at the processes by which they recruit, select, and develop their cooperating teachers.

### Recommendations for Program Improvement

In the interest of full disclosure, we do not pretend to have a perfect system for preparing cooperating teachers. In fact, we can’t even describe what that perfect system would look like in practice given the non-existence of evidence-based approaches for the professional development of cooperating teachers. The authors are employed at a large, doctoral-degree granting institution where expectations for faculty research and grant-writing take precedence over many program functions, including the selection and preparation of cooperating teachers.

Cooperating teacher selection criteria are limited to at least three years of K-12 teaching experience, recommendations from administrators, both K-12 and university, and the willingness to serve within that capacity for an entire academic year. Teacher education faculty members within the program rely on student teaching orientation meetings (during which the same administrative content is routinely covered), dissemination of a cooperating teacher handbook, periodic e-mail correspondence, and informal interactions with university supervisors to maintain connections with cooperating teachers. The exclusive reliance on these forms of communication has proved problematic for a number of reasons: interactions are custodial in orientation, limited

impact on in-service teacher professional development, lack of an individualized approach focused on cooperating teacher needs and so forth.

Due to these concerns, faculty members within the involved teacher education program have initiated discussions regarding the development of a number of strategies that are expected to enhance the preparedness of our cooperating teachers by expanding the human resource base, building relationships, increasing access to key program information and personnel, and improving professional development using web-based instructional modules.

- Recruit additional cooperating teachers and student teaching placement sites through use of existent networks of professional development schools and state teacher associations. The recruitment of additional cooperating teachers will allow for the more selective placement of student teachers taking into account different personalities, interests, and professional strengths/weaknesses.
- Increase financial compensation for cooperating teachers during student teaching and other preliminary field placements. The increased stipend (while admittedly still not enough) represents a concrete gesture of the institution's appreciation for the time and effort invested by cooperating teachers on behalf of the involved pre-service teachers.
- Recognize cooperating teachers as field-based teacher educators and valued members of the faculty through invitation to department events/socials, public recognition in alumni newsletters or magazines, awards for outstanding service to the program, involvement in faculty meetings or retreats, consultation during the program accreditation process, and so forth.
- Integrated use of various social networking technologies like Skype, Facebook, Instant Messaging, and Twitter to supplement more traditional communication modes and provide

continual interaction among university personnel and cooperating teachers. These types of technologies are likely to play a more prominent role in the student teaching process as the current generation of tech savvy pre-service teachers gain practical experience and join the ranks of cooperating teachers.

- Increase cooperating teacher access to key administrative resources through the development of a program specific website. Examples of website content include: (a) program goals and objectives, (b) roles and responsibilities for each member of the student teaching triad, (c) policies and procedures, (d) biographies for cooperating teachers, university supervisors, and current student teachers, (e) student teaching observation and evaluation forms, (f) digital video clips of student teacher orientation and training, and (g) answers to frequently asked questions.
- Provide greater access to quality professional development through the planning, implementation, and evaluation of a series of web-based instructional modules designed to meet the specific needs of cooperating teachers. These web-based modules are expected to enable cooperating teachers to engage in ongoing professional development in an asynchronous format that eliminates many of the barriers inherent to school-based settings (e.g., need for substitute teachers, competing priorities after the school day, financial constraints, travel costs). As an initial step in this process, the authors are engaged in a state-wide needs assessment to identify the critical professional development concerns of cooperating teachers.

## Summary



The need for teacher education programs to develop effective cooperating teacher training strategies is indisputable, imperative, and of utmost importance. Unfortunately the related literature provides limited evidence-based solutions to the persistent problems of cooperating teacher recruitment, selection, and professional development. Despite the lack of empirical evidence, this problem can no longer be ignored. All teacher preparation programs must determine what they can do to select and prepare cooperating teachers who are capable of making a meaningful, positive contribution to the development of student teachers. In order to best prepare our student teachers, we must make an initial investment in the individuals who will have the final and perhaps most lasting influence, our cooperating teachers.

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## **The Impact of Teacher Quality on Preschool Mathematics Instruction**

*Jeff Leffler and Sallie Harper*

Abstract

This article discusses instructional methodologies and evidence of effective mathematics instruction for early childhood education. The authors argue that teacher preparation may be the single most important factor in providing quality mathematics instruction in early childhood education settings. They fault the standards movement for pressuring early educators to abandon developmentally effective practices for an overemphasis on direct instruction, as well as a narrow application of these developmentally appropriate practices for a lack of intentional teaching in early education settings. They provide theoretical support for a blending of these seemingly disparate philosophies to enhance student learning. Finally, they report on a qualitative study of the attitudes and practices related to mathematics instruction of preschool teachers in a Southeastern state earning a nationally recognized credential. The goal of this study was to evaluate how preschool teachers' professional preparation impacts their attitudes towards mathematics instruction and how this relates to the quality of their mathematics instruction.

The quality of instruction received by young children is directly related to the skill, abilities and beliefs of the early childhood classroom teacher. With over fifty percent of the nation's families having children under five dependent on non-parental care, this workforce is serving the educational and care needs of many children. Yet, personnel in child care represent a wide diversity of educational experience and background resulting in an uneven quality of educational experiences being provided (National Research Council, 2009). Research consistently suggests that teacher-child interactions have the greatest impact on child educational outcomes. Also, an increased emphasis has been placed on preschool mathematics as recent research reports have related preschoolers' abilities to engage in mathematical thought with later school achievement. The combination of these two trends has highlighted the importance of improving teacher quality and ultimately student outcomes (Kilday & Kinzie, 2009). Unfortunately, preschool educators do not uniformly embrace the academics of mathematics and literacy because some focus on wholly play-based learning experiences while others focus on basic-skills and intentional direct instruction. Additionally, the educational attainment of preschool teachers impacts their beliefs about developmentally effective practices and their abilities to implement these beliefs (Brown, Molfese, & Molfese, 2008). It seems that a highly qualified teacher successfully blending play-based learning with intentional direct teaching strategies is the key to student achievement in mathematics and literacy, particularly when using literature experiences as a bridge for these seemingly disparate philosophies.

Jean Piaget, perhaps the most well known theorist in the constructivist approach (Cook & Cook, 2010), based his theory on observations of children's shifts in thinking as they adapt to their environment. He believed that children created their own theories about the way the world works as they adapted to new experiences (Bee & Boyd, 2007). Piaget viewed learning as coming from the child versus being passed on by the teacher. He felt that the teacher should step back and not get in the way of children's learning. Piaget emphasized that the proper learning materials be provided for children at each stage of cognitive development including preoperational, concrete operations, and formal operations. Over the years, the American educational system has moved away from Piaget's constructivist viewpoint by bending to the pressure to excel such as after the Soviet's first manned space flight. Poor outcomes resulted when teacher directed methods were used to teach abstract concepts before children were developmentally ready. Constance Kamii suggests that instruction be geared around interesting and meaningful problems presented to students for their experiential consideration versus the problems being presented in worksheet form. The teacher then uses skilled questioning to guide children's learning experiences (Crain, 2005). Lev Vygotsky emphasized how the teacher can provide input to expand children's learning. He suggested that educators be aware of each child's zone of proximal development, the difference between what a child can do on his own and what he can do with the help of a more skilled peer or teacher. The teacher then creates situations for the child to grow in this zone through a process called scaffolding, a support created through social interactions. The active learning approaches of Piaget and Vygotsky are supported by well-designed classrooms that provide a variety of hands-on activities for students (Bullard, 2010).

While much data supports the idea that preschoolers learn best in learner-based settings, many preschool teachers succumb to the pressure to "really teach" and engage in direct instruction

practices. Most early childhood teachers conduct a daily group experience in which the current date, days of the week, months of the year and perhaps even weather are covered. While calendar math activities can cover math skills, children often struggle when these are presented in this typical rote format of the group experience often not mastering the skills until after third grade (Ethridge & King, 2005). Children are able to engage in complex mathematical thought and when they are afforded “a supportive, nurturing environment, young children can joyfully use mathematics to explore and understand the world which surrounds them” (Rudd, Lambert, Satterwhite, & Zaier, 2008, p. 75). Unfortunately with recent educational policies mandating increasingly more strict academic standards, there is little time devoted to creative thought, free exploration, and pretend play in the kindergarten classroom. Ray and Smith (2010) suggest that the more preferred instructional methods by children are being pushed aside for those that provide the potential to cover the greatest amount of content. They feel that the kindergarten programs are increasingly focusing on cognitive skills at the expense of social-emotional and other domains of development. While the cognitive abilities of memory capacity, attention, motivation, and persistence are related to future academic success, these cognitive skills are best supported by developmentally appropriate practices. Some explicit formal instruction is necessary particularly for teaching phonological awareness and some math skills. However, most other literacy and math skills as well as social-emotional development are best promoted by developmentally appropriate methods involving much time dedicated to self-initiated play activities. Discovery and understanding of science is best accomplished through play in kindergarten in which the teacher allows the children to learn through the process of inquiry.

Charlesworth (2005) suggests that the concepts emerging during the early childhood years include one-to-one correspondence, number and counting, shape, spatial sense, logical

classification, comparing, and parts and wholes. Children acquire these concepts in three types of learning experiences including naturalistic, informal and structured experiences. The main way preschoolers construct mathematical understanding is through problem solving in play activities, in the midst of daily routines, and from stories. The language of mathematics and providing a language rich classroom environment is essential to facilitating young children's mathematical reasoning skills. As preschoolers have concrete experiences with classroom materials and interactions with others, they develop an informal understanding of arithmetic principles (Baroody, Lai, Li, and Baroody, 2009).

### Teacher Preparation

The effectiveness of the teacher in the classroom seems to be a prevailing critical component of young children's success in mastery of both literacy and mathematical skills (Hindman, Skibbe, Miller, & Zimmerman, 2010). Many studies have shown that early childhood teachers with certificates in early childhood such as the Child Development Associate Credential (CDA) provided by the Council for Professional Recognition tend to be more effective in the classroom than those without formal teacher education (Hinitz, 1998).

A teacher with a bachelor's or more advanced degree tends to be even better able to provide a quality preschool learning environment. Some studies indicate that formal training is even more important than experience in terms of providing quality preschool experiences (Brown, Molfese, & Molfese, 2008). However, there is a high level of variability in the level of formal education preschool teachers in the United States have received. While many early educators earn a credential, it is not probable that a preschool teacher would hold a bachelor's or more advanced degree in early childhood development. Another key impact on the quality of mathematics instruction in the classroom is the teacher's personal feelings about math (Humphrey & Hourcade,

2010). While most preschool teachers report that they feel mathematics instruction is important, classroom observations indicate that they provide little to no math instruction (Brown, Molfese, & Molfese, 2008). Many teachers experience math phobia related to negative early school experiences with math. Additionally many teachers as students found math to be dull and irrelevant to their day to day lives (Hodgen & Askew, 2007). One qualitative study suggested that some educators with a personal math phobia avoided math instruction when possible, while others sought out assistance from a more skilled colleague. Math phobia is something an educator should seek assistance to overcome because it can contribute to lack of quality math instruction as well as the possible transference of the phobia to the learner (Humphrey & Hourcade, 2010). Elementary teachers tend not to genuinely understand the basic mathematical concepts they are teaching. Because teacher content knowledge is so important, supports such as professional development and formal teacher training programs need to address mathematical content knowledge in an effective manner (Faulkner, 2009). Studies indicate that the most effective professional development for early educators is one that provides direct instruction simultaneously with classroom mentoring. However, a higher level of formal education still seems to be most important in terms of producing more elaborative interactions in the classroom (Rudd, Lambert, Satterwhite, & Smith, 2009).

### Teaching Practices

The instruction preschool children receive in the classroom is closely tied to teacher's personal beliefs about developmentally effective practices as well as teachers' perceived abilities to put these beliefs into practice. The increased attention on preschool attainment of basic skills has caused some debate among early childhood educators about how to best teach young children.



While some hold fast to a child-centered approach, others feel that practices driven by basic skills or direct instruction are most effective (Brown, Molfese, & Molfese, 2008). Symbolic or pretend play has long been associated with the cognitive growth of young children including the skills of divergent thinking, problem-solving, impulse control, and representational competence. There has also been much evidence that sociodramatic play promotes literacy. More recently research has focused on pretend play's impact on mathematical understanding. One study conducted by Yawkey highlighted the importance of the teacher's guidance in sociodramatic play. Play is a powerful teaching tool because it provides a meaningful context for young children to acquire and practice new skills and for teachers to use to assess children's learning. Emfinger (2009) found in a limited study that children's numeracy concepts were demonstrated in their play. Her study also promoted the use of play as a standard curricular component in preschool classrooms as well as an effective teaching tool in the primary classroom. However, there is also some strong support for the effectiveness of direct instruction for teaching mathematics especially for children with disabilities. Cole and Wasburn-Moses (2010) suggest that the best strategy is the combining of these seemingly disparate philosophies into high quality instruction that reaches varied types of learners.

An implication for instruction derived from Howard Gardner's multiple intelligences theory is the individualization of instruction. If students have varying types of intelligence, then instruction should be geared towards these individual strengths. Additionally teachers should approach topics through a variety of entry points. This approach covers necessary topics while respecting the student's preferred learning modalities (Gardner & Moran, 2006).

A powerful tool for connecting direct instruction with a play-based model that motivates preschoolers' mathematical learning is the use of literature: "Literature motivates students to

learn, provides a meaningful context for math, celebrates math as a language, demonstrates that math develops out of human experience, fosters the development of number sense, and integrates math into other curriculum areas” (Shatzer, 2008, p. 649). Experiences with literature may also support the use of math mediated language as a teaching tool. Skilled teachers are able to plan learning experiences that connect the language of mathematics to content knowledge children already have: “When teachers focus on the language of math and present mathematical concepts in fun engaging ways, children are motivated to learn concepts beyond what is traditionally expected of their age” (Rudd, Lambert, Satterwhite, & Smith, 2009, p. 64). Piaget believed that as children construct knowledge, their ideas and concepts can be represented through various means including the arts, language and writing, and block building (Emfinger, 2009). Picture books as an aspect of a group learning experience can be used to make mathematical connections and provide visuals to support mathematical concepts. In one study, when children’s literature was used to promote math learning, “children were better at explaining their reasoning and strategies, enjoyed mathematics more, showed greater overall persistence on difficult tasks, were thinking more about what they learned, and experienced a level of success” (Shatzer, 2008, p. 650). A key consideration in using literature to promote mathematical learning is the quality of the piece of literature. Skilled teachers are able to select quality books and make the literature/mathematics connections for the children. As teachers do this in the group setting, the children will begin making the literature/mathematics connections on their own during self-selected reading experiences.

The discussion method of instruction can benefit students by promoting conceptual learning and analysis in the form of discussions where they are able to elaborate on their learning. Good relationships with students will increase the likeliness of them participating in discussions

as well as inform the teacher as how to best engage individuals. By having a specific goal for the discussion, the teacher is better able to determine which topics that veer off of the planned path and are indeed meaningful and which ones need to be brought back to the point of the discussion. Effective discussion leaders know how to provide good open-ended questions to spark conversation, how to assign roles to keep each student engaged, how to wait appropriately after questioning, and how to regain control of a discussion that is getting off task (Tarim, 2009).

Theorists such as Piaget and Vygotsky have emphasized the constructivist perspective of learning. Piaget viewed the social environment as a means of producing conflict in children which evoked the need to construct knowledge at a higher level to bring balance. Vygotsky viewed the social context as the very basis for development (Liang & Gabel, 2005). The cooperative teaching method takes the discussion method a step further by using small groups of children working together to enhance one another's learning. This method enhances learning by providing the opportunity for students to talk through their thought processes with one another as well as to help each other through the assigned tasks. In fact, it is the mutual cooperation and responsibility for one another's learning that is the hallmark of this approach (Tarim, 2009). A large body of research supports cooperative learning as an effective means to boost academic performance, more successful than more traditional learning strategies such as lecture and discussion. While most students perform well in a cooperative learning environment, African American students in particular seem to perform particularly well in this type of learning environment (Ellison, Boykin, Tyler, and Dillihunt, 2005).

### The Study

For the present study, the goal was to conduct a qualitative examination of the instructional practices of child care teachers in Mississippi related to mathematics instruction. A total of 15

observations were conducted in preschool classrooms (ages 3 to 5). Each observation was 2.5 to 3 hours in length and occurred between the hours of 9:00 AM and 12:00PM. This time frame was chosen as it tends to be the period that most instruction occurs in a child care classroom. The *CDA Assessment Observation Instrument* was used to collect data during the observations. This assessment tool is typically used to evaluate teacher competence for the process of obtaining the *Child Development Associate Credential (CDA)* from The Council for Professional Recognition in Washington, DC. The CDA Council is affiliated with the National Association for the Education of Young Children (NAEYC) and recognizes teacher competence in early care and education. Currently there are 5,676 individuals in Mississippi with an active CDA (State Early Childhood Advisory Council, 2010).

The scale looks at various aspects of care and instruction including health and safety, the learning environment, and promotion of optimal development across domains. Each section of the scale provides indicators that represent best practices. The candidate is given a score on a scale of 1 to 3, with 1 meaning the desired practice occurs rarely, a 2 indicating some evidence of the practice, and a 3 representing a prevailing practice (The Council for Professional Recognition, 2006). While the scale does evaluate aspects of instruction that would be related to math learning, specific data related to the types of math materials provided as well as examples of explicit mathematics instruction during the observations was documented as well. Additionally, the researcher conducted a workshop on meeting the mathematics standards of the *Early Childhood Environmental Rating Scale-Revised* for the Hattiesburg Early Childhood Association. A total of 12 early educators were present. During this workshop, a discussion component was used to elicit anecdotal responses to mathematics instructional practices as well as teachers' attitudes towards math. Finally, interviews were conducted with preschool teachers to gather anecdotal responses

related to their instructional practices in mathematics. It should be noted that all classrooms observed were led by teachers pursuing the CDA credential for preschool caregivers. Therefore, the results of this study would not necessarily be representative of child care teachers without this specialized training or teachers with a degree or other advanced preparation.

All of the observed classrooms featured some type of math materials accessible to the children during play for at least a portion of the day. Six of the classrooms provided a separate, organized math center. A sample of materials at one classroom in Long Beach, MS, included a calendar, number poster, computer software, number card game, patterning game, pattern cards, small building blocks, number magnets, unit blocks, pattern blocks, cash register, play money, and rulers. A center in Hattiesburg, MS, provided pattern beads, number puzzles, number poster, number cards, balance, thermometer, rulers, cash register, calculators, clock, calendar, rain gauge, measuring spoons, measuring cups, unit blocks, shape poster, small building blocks, math books, math games, growth chart, menus, and peg boards. Most of the observed classrooms incorporated math materials in various learning centers including dramatic play, science, library, manipulative, blocks, or classroom display versus providing an organized math center. One such classroom had materials including number blocks, number puzzles, pattern blocks, shape sort, unit blocks, shape posters, sequencing beads, counting cards, and a few math books. A number of observations were conducted in which there were very limited math materials provided for the children. These materials usually consisted of some type of number poster displayed on the wall, a clock on the wall, unit blocks and some type of math relation in a few books. In all of the classrooms that featured an organized math center, the teacher engaged in specific math instruction during free play with hands-on activities with the materials and scaffolding with questions with small group of children who self-selected the math center. In the classrooms without a specified math center

the teacher tended to engage in little to no specific math teaching during the 2.5 to 3 hour observation. In addition to instruction in the organized math learning center through play, two of the teachers were observed providing intentional math instruction during group experiences. In one case the teacher engaged in specific math teaching during music time (counting & spatial relationships). In a particular classroom featuring a high level of math materials and instruction (the Hattiesburg, MS, classroom mentioned previously) the teacher developed an activity to help the children (ages 3 and 4) to develop an understanding of the concept of zero. This was of particular interest since preschool children tend to have difficulty with this concept. For this activity, the teacher used a rain gauge and checked its accumulation on a daily basis. She then had the children assist her in creating a simple graph to track the accumulation of rain. A number of days passed with no precipitation. The children were able to connect the emptiness of the gauge with the number zero as the teacher asked them which number from their number chart would correspond with the amount they needed to document on the days with no accumulation. It was interesting that the children arrived to this conclusion as a group with the skillful questioning of the teacher.

During the math workshop conducted for the Hattiesburg Early Childhood Association, the teachers were asked to divide in to two corners of the classroom based on their personal attitudes towards math. They were asked to group in one corner if they had either had negative experiences related to math or a general dislike for math. The other corner was reserved for those who had a particular affinity toward math. Of the 12 teachers present, 10 grouped in the corner representing negative attitudes towards math. Only 2 moved to the corner representing positive attitudes towards math. After grouping in this way, the participants were asked to share the reasoning for their choice. The common denominators seemed to be application of math to real life and

experiences with a particular teacher. This was true for both positive and negative attitudes. For instance, the teachers tended to have negative attitudes related to a lack of understanding how certain mathematical concepts applied to real life. The 2 teachers with positive attitudes were able to relate how they applied math on a daily basis. Additionally, many of the teachers with negative attitudes towards math shared particularly poor experiences with a particular teacher that was perceived as either boring or in some cases uncaring and mean. The 2 teachers representing positive attitudes towards math were able to share about a teacher or teachers that helped math come “alive” for them and therefore made the instruction more meaningful. After the groups shared their feelings, they were asked to come to the center of the room if they felt math instruction was important. Of the 12 present, all moved to the center of the room. The discussion then turned to how in spite of the fact that they felt math instruction was important, most of them avoided it because of their own negative attitudes and experiences. These results held true during the individual interviews with teachers. Most reported their personal negative experiences with math as a handicap for the present day practice in spite of their feelings that math instruction was important. The idea of the typical calendar math activities being ineffective was presented for discussion as well in the workshop. While some of the teachers seemed to catch on to the fact that math concepts could be presented in more meaningful ways, it was evident that most were unwilling to let go of their habit of providing this type of instruction.

The leading goal of this investigation was to determine if preschool teachers believed mathematics instruction to be important and if so, do they intentionally teach mathematics as an important daily aspect of the curriculum. It was suspected that most teachers would not provide a substantial amount of explicit mathematics instruction. The results from this study seem to indicate that while most teachers verbalize that mathematics instruction is important, most do not

translate this belief to intentional practice in the classroom. This may be due to the teacher's own negative attitudes towards math in general based on prior poor experiences with math learning. Also, a heavy emphasis on literacy development may make some teachers feel there is no time left for math instruction. Still other teachers may not provide the necessary math teaching for preschoolers due to a lack of training to do so effectively. It was hopeful that a couple of the teachers did provide intentional instruction through both meaningful group experiences and play-based small group and individual interactions with concrete materials. Also, each teacher observed did include some type of math materials in the classroom even though most did not provide meaningful math instruction. Since observations were not conducted in classrooms with teachers without a credential, there are no data to make comparisons. Additionally, teachers with more advanced training were not observed. Perhaps these teachers tend to provide more quality mathematics instruction. The major finding of this study is that most of the teachers observed were not providing the quality mathematics instruction necessary to prepare young children for future academic success. Clearly there is a need for better professional development and perhaps a work force with more advanced teacher preparation such as an associate or bachelor degree.

### Conclusion

Recent years have brought increased expectations about the development of academic skills in preschool. Add to this that "half of children in the U.S. have difficulty making a successful transition to kindergarten, due in part to underdeveloped literacy and mathematics competencies" (Hindman, Skibbe, Miller, & Zimmerman, 2010, p. 235) and that an achievement gap related to children from low-income homes is already present before entering preschool. A highly qualified preschool teacher seems to be the essential factor to providing both the kind of play-based early mathematics and literacy experiences (Emfinger, 2009) and intentional direct instruction



necessary to promote later positive student success (Cole & Wasburn-Moses, 2010). This kind of teacher can select excellent pieces of children’s literature to use as a tool to connect play-based activities with intentional group instruction. When “read-aloud selections are also chosen to develop mathematical ideas, mathematics is humanized, its relationship to the arts is emphasized, and the picture books and extension activities stimulate positive reactions, interest, enjoyment, and confidence in children” (Shatzer, 2008, p. 652). The current study seems to indicate the need for better professional development and teacher preparation in the form of a college degree for preschool teachers.

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## **Positive Behavior Support**

### **Pre-Service Teachers Support Pro-Social Behavior in Preschool Classrooms**

*Patricia S. Scheffler and Jessica Hodge*

*Grove City College and Lakeview School District*

## Introduction

All teachers desire to have prepared strategies for helping children develop skills to minimize challenging behaviors. A research based, and highly effective strategy that helps teachers to aid children in this process is the Positive Behavior Support (PBS) model. This system is

designed to prevent problem behaviors through several steps of identifying causes and appropriate responses to behaviors. By identifying the observable behavior of the child, followed closely by consequences that will either reduce or increase the likelihood of a behavior, the teacher actually aids the child in being able to see what they're doing and how it is impacting other people. This model was presented to student teachers who used it during their early childhood student teaching placements in suburban, rural, and urban settings. Student teachers with this training in PBS were evaluated by their cooperating teachers and college supervisors on the use of this evidence-based practice in the classroom.

### Literature Review

In 1997 the National Association for the Teachers of Young Children (NAEYC) revised the guidelines for developmentally appropriate practice (Bredekamp & Copple, 1997). The guidelines clarified that developmentally appropriate practices (DAP) are demonstrated when professional decisions regarding the well-being and education of young children are reflected in three goals. The last of the three goals was: Knowledge of the social and cultural contexts in which children live to ensure that learning experiences are meaningful, relevant, and respectful for the participating children and their families. The Positive Behavior Support Model is consistent with developmentally appropriate practices. When implemented comprehensively and school-wide, can create a classroom environment that fosters growth and learning (Fox, L., Jack, S., & Broyles, L., 2005).

The PBS initiative involved the adoption of a new approach for facilitating the development of children's social competence and addressing challenging behavior. The program has adopted a framework for classroom practices that has been described as The Teaching Pyramid (Fox, Dunlap, Hemmeter, Joseph, & Strain, 2003). (See appendix) This framework involves four

levels of classroom practices that represent prevention, promotion, and intervention. The bottom two tiers of the pyramid describe classroom practices that are essential for the prevention of challenging behaviors and the promotion of social competence in all children. At the foundation of the pyramid is the development of positive relationships with children, families, and staff. The second tier is the use of classroom practices that prevent problem behavior, engage the students, and support the development of social skills. For many children, these two levels of classroom practices may be all that is needed to support their healthy socialemotional development (Fox, L., Jack, S., & Broyles, L. ,2005).

Research supports that a positive, direct instructional approach is more effective than traditional punishment-based alternatives in improving student academic success and improving overall school climate (Horner, 2000; Myers, 2001). PBS focuses on preventing problem behaviors and improving social skills based on common sense strategies such as modeling, prompting, and positive reinforcement (Dunlap & Powell, 2009.) Consistent with the Child Guidance Model of classroom management (Gartrell, 2003) those students were exposed to in undergraduate Early Childhood Education coursework, PBS is not focused on punishing bad behavior, disciplining misbehaving children or correcting classroom infractions.

Implementation of positive child guidance strategies is probably the greatest challenge for student teachers. It can be challenging to implement developmentally appropriate experiences for young children who are entering early childhood programs with diverse backgrounds. This usually requires a firm presence and a strong sense of purpose, balanced with substantial patience and good humor (MacDonald, 1999). Student teachers are often inexperienced in applying these complex skills simultaneously and therefore find it challenging to establish this multifaceted environment.

There is no simple formula for developing and maintaining a good learning atmosphere in a classroom. Neither is it a series of set prescriptions to be applied when behavior problems arise (MacDonald, 1999). It is important that the student teacher recognize that many potential discipline problems can be avoided if teachers create an environment in which young children feel safe, secure, accepted, and appropriately challenged. Additionally, it is of the utmost importance to remember that in early childhood classrooms, even if children are of a similar age, there can be vast differences in where each individual child is developmentally; therefore, positive child guidance should be viewed as part of the daily learning needed by young children in order to develop a strong sense of self and appropriate social skills. This model helps replace challenging behavior with acceptable behavior where the focus is on prevention and self-regulation. A classroom environment that is supportive and equips novice teachers to avoid power struggles or “put out fires” will foster learning in the children present. Exploring the reasons for problem behavior and redesigning environments with a focus on teaching new skills to replace challenging behaviors can result in a positive learning environment.

#### Implementation in Undergraduate Student Teaching Placements

Simonsen, Fairbanks, Briesch, Myers, & Sugai (2008) identified five evidence based classroom management practices consistent with Positive Behavior Support. Those practices included maximizing structure, teaching and practicing positively stated expectations, engaging students actively and successfully in instruction, acknowledging appropriate behavior, and developing a continuum of strategies to respond to inappropriate behavior. Each one of these strategies will be described and some will include excerpts of reflections by pre-service teachers as they sought to implement these strategies in their early childhood placements. When used properly and comprehensively, the results were effective guidance and behavioral support for the

preschool children. Beginning in the fall of 2008, pre-service teachers majoring in Early Childhood Education received targeted training in PBS. The training was reinforced through modeling and additional seminars. Pre-service teachers were held accountable for utilizing this approach when the college supervisor came to their preschool classroom for observations of performance. The novice teachers also submitted weekly reflective journals that often highlighted how they were using PBS in the classroom. The focus of the training was on the five evidence-based practices (Simonsen, B. et.al., 2008), recognizing the ABC's, and analyzing the teaching pyramid.

### Five Evidence-Based Practices

#### 1. Maximize Structure

When the structure and functions of classrooms are designed to increase predictability and to accommodate individual and collective needs of students, children develop socially and emotionally. Maximizing structure includes organizing space, managing time, materials, and paperwork efficiently.

Another component of maximizing structure is using pre-correction. This strategy is the opposite of correction in that it is proactive. Pre-correction is what happens directly before an expected behavior, and correction is associated with what happens directly after a behavior. For example, the teacher prepares the children to get into an orderly line to go to the restroom. The teacher uses developmentally appropriate group alerting to get the attention of the children and explains and models the line up behavior expected. When using pre-correction to correct previously challenging behaviors, it is important to remember that the new, appropriate behavior is in competition with the old, inappropriate behavior; therefore, the new behavior should be praised and reinforced to ensure its continuation.



Some benefits of pre-correction cited by Simonson et. al. (2008) are it decreases the time teachers spend in correction/redirection, it prevents repetition of behavioral errors, it sets up situations in which teachers can use praise, and it helps to create a more positive classroom climate.

## 2. Teach and Practice Positively Stated Expectations

This evidence-based practice involves establishing 3-5 positively stated classroom rules that are concrete, observable, and measurable. It is important to establish, post, teach, review, monitor, and reinforce, these positively stated expectations. For example, some classroom rules that even preschool children can help the class decide are rules such as be safe, be respectful, keep hands feet objects to yourself, etc.

The rules or expectations should be prominently displayed with picture cues as reminders. The teacher should actually teach and reinforce the behaviors that are characteristic of compliance with the rules. Another important component is to emphasize modeling. For example, a child forgets to walk in the classroom and races from one activity center to another. The teacher will first take the child by the hand and say something like, “Let’s go back and walk together,” or ask, “How do we move in our classroom?” Second, continue to model, if needed, guiding the child towards the positive behavior. For example say, “Are you remembering how we move in our classroom?” or “Thank you for remembering to use your walking feet.” The final goal would be that the child initiates the behavior without a reminder. For example, the teacher says, “Thank you for remembering you are making our classroom a safe place.”

Here’s a reflection by a pre-service teacher in a rural setting.

I found last week’s seminar on effective behavior management techniques extremely helpful in my student teaching experience. I have been re-reading and utilizing the information presented in the seminar

and am noticing how well these principles actually do work in the classroom. It's extremely encouraging to see how well these preventive strategies are working and an even better feeling knowing that I can praise a child for doing something right rather than correcting them for doing something wrong.

Perhaps the most effective tool I have utilized thus far is teaching a child how to behave. I had never thought of behavior as something to really be taught before, and learning that I should be teaching not only an academic lesson, but also how to behave during the lesson was helpful. Now as I am instructing the class I make sure I state my expectations in a positive manner at the beginning of the lesson and revisit those instructions periodically throughout the instructional time. I also re-visit and review my expectations as needed and am sure to provide children who are following the directions with specific praise. This method especially works well with the children, as all of them still want to please their teacher.

### 3. Engage Students Actively and Successfully in Instruction

If the classroom uses the play based or activity center approach to learning and it is seen that children move around from one center to another, then this is developmentally appropriate. It is accurate to say that children this age have short attention spans. Some effective strategies for engaging children at the preschool level include: child choice centers around a theme, partner sharing, dramatic play, sand or water discovery, finger plays, gross motor skill practice, and songs

with motions to name a few. When a child is happily and actively engaged in learning, challenging behaviors are minimized.

#### 4. Acknowledge Appropriate Behavior

Besides being inexpensive and a catalyst for improving student teacher relations, praise has been shown to increase on-task behavior and limit challenging behavior (Lampi, et al. 2005). Specific and contingent praise should follow appropriate actions. In order to use praise to its optimal effect, Lampi, et al. recommended that the teacher use names, make it specific, vary the statements, make it convincing, and make it age appropriate. The positive reinforcement can be represented on the continuum of explicit rewards including tangible, social, or a bonus activity. Here's a reflection by a pre-service teacher in a suburban setting.

This is exciting---I had a great day at preschool today! I employed more pre-correction, praise, involved them on almost every page of the book, (I got to read the book again) and simplified the song. It went so much better today! I love the kids. We had a substitute today so I got to do more than I usually do. The substitute said that I work well with the kids! I was encouraged...Anyway, just wanted to say that today was a great day. Praise is truly a powerful tool!

#### 5. Develop a Continuum of Strategies to Respond to Inappropriate Behavior

It is inevitable that children will exhibit challenging behaviors from time to time. It's important for the teacher to pre-plan the consequences prior to events where children exhibit this type of behavior. In order to avoid escalating problem behavior a teacher's response should be calm, avoiding emotion. When speaking to a child that needs to be corrected, an effective teacher's commands are brief and are delivered one at a time. The teacher directives should be stated rather

than posed as questions. A skillful teacher uses proximity and eye contact when responding to challenging behaviors.

When considering the ABC's of Positive Behavior Support, one must recognize the antecedent, behavior, and the consequence. Antecedents influence the behavior and responses of students. How classrooms and schedules are arranged and how we interact with students can serve as antecedents (or triggers) to their behaviors (PaTTAN, 2008).

Behavior is what the student does – what you can see and measure. It is not what we think the student may be feeling or thinking. When we talk about student behaviors we should be using action words as opposed to words that label. For example, hit, dance, sleep, or yell are all action words, and we can count instances of these behaviors when they occur. Lazy, bad attitude, fresh or good are words that label, but we cannot measure or count them. In order to plan for changing behavior, we must be able to describe the behavior we want to change in very specific terms. That way everyone will be referring to the same behavior and will be able to take data about that behavior more accurately (PaTTAN, 2008).

Consequences are what happen after a behavior has occurred. Consequences can be good or bad, expected or unexpected. For example, I can drive to Dunkin Donuts and go through the drive through. It can be closed for some reason and then I don't get my coffee and donuts. On the other hand, they can be running a "special," and I get a free cup of coffee with my donut. There are two types of consequences. What happens just after a behavior occurs can serve to either reinforce or punish that behavior. If a behavior is reinforced, it will tend to occur again in the future – either at the same frequency or increased frequency. If a behavior is punished, the behavior will tend to decrease in frequency in the future or stop completely (PaTTAN, 2008).

Developing a supportive responsive relationship between the adults and children is an essential component to promote healthy social-emotional development. According to The Teaching Pyramid model (Jack & Lindeman 2005) around 80% of children in preschool classrooms that have nurturing and responsive relationships with high quality supportive environments will develop normal pro-social behavior. These behaviors are characteristic of Tiers I and II. (See appendix A). Typical of Tier III; between 10-15% will need targeted social-emotional supports. For example, a student that was off task often yet very interested in horses. The teacher may incorporate books about horses in the literacy center, add props related to horse in the dramatic play center or toy horses in the sand center in order to peak the child's interest.

Between 1-5% of preschool children will need intensive interventions in order to develop pro-social behavior. Assessment based intervention that results in an individualized behavior support plan is one approach. For a child who needs additional support, or Tier IV level intervention, one valuable option is implementing a Functional Individualized Behavior Management Plan. Some resources that will be needed to create and implement the plan include: family members, identifying the most rewarding activities or objects for the child, and identifying culturally appropriate communicative skills. The assessment phase may determine that additional staff is needed. Here's a reflection by a pre-service teacher in an urban setting.

*Joshua is a five year Caucasian male who attends a local Head Start program in the area. The school day is an unpleasant one for Joshua; many days he is reprimanded more than twenty five times (in a 4 ½ hour school day), and it is not unusual for him to be sent home. Joshua's day consists of hitting, punching, and kicking his peers and the teachers; he has trouble staying on task and becomes very irritable if he does not get his own way. He is viewed by his classmates as "scary" and "mean", and no one wants to sit by him during lunch or carpet time. I encountered*

*this little boy during my student teaching and discovered that an intensive intervention program based on the PBS system was needed in order to help him overcome his social and emotional problems.*

*Joshua would be categorized in the fourth tier of the pyramid model discussed earlier. In order to help him overcome his undesirable behaviors we needed to create an individualized positive behavior support plan. Before creating an individualized plan for Joshua it was necessary to understand the “ABC’s” of his situation. This “ABC” acronym is used to help teachers/researchers understand why a student might be acting in a non desirable way; the Antecedent (A) is what triggers the Behavior (B) which results in the Consequence (C). In Joshua’s case, he displayed the undesirable behavior of hitting his peers. In order to help Joshua overcome his negative behaviors, we had to research and observe him to decipher what the antecedent was that caused the hitting. We observed that the behavior was triggered by peers not giving Joshua what he wanted (a toy or a snack). Whenever Joshua was triggered by the antecedent he behaved in a negative way to get the consequence he desired. The behavior of hitting the other student led to the consequence of receiving the toy he wanted and receiving attention from the teacher. Considering Joshua got what he wanted from acting in the way that he did, he was more likely to reproduce the same action in future situations. Once we understood the ABC’s of Joshua’s situation, we could delve into the situation using the PBS model to decrease the likelihood of the problem behavior happening again.*

*In Joshua’s situation we decided to use an external reward system that praised him for behaving in a positive manner. We explained the system to Joshua and his parents so that the system could be followed through with at home as well as at school. The plan incorporated a reward that Joshua desired, stickers, and involved extensive communication, precorrection, and*

*specific praise. Joshua was evaluated every fifteen minutes, if he did not hit anyone within those fifteen minutes then he received a sticker; at the end of the day if Joshua had enough stickers he received a prize from the prize box. This individualized plan helped Joshua maintain a positive attitude throughout the day with teacher assistance. It was very exciting to see how this system helped Joshua in the classroom; students began to play with him, he was academically growing, and he proved to be happier.*

### Conclusion

When pre-service teachers were trained in the Positive Behavior Support model and taught the five evidence-based classroom management practices (Simonsen, et. al. 2008), they gained support to confidently manage preschool classrooms in a variety of settings. They were equipped to support pro-social behaviors, as well as to respond to inappropriate behavior with an attitude of teaching rather than punishment. The preservice teachers applied their knowledge of PBS in order to identify students in with their matching Tier and implement supports and interventions where needed. When observing and correcting challenging behaviors, they gained expertise in identifying the underlying causes or antecedents in order to promote desirable consequences. The ABC's of managing the classroom were not a simplistic approach that could only be accessed through experience but rather based on scientifically based strategies that created positive, inviting classroom environments with children who exhibited pro-social behaviors.

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## Appendix A

## Positive Behavior Support in Early Childhood Settings

### THE TEACHING PYRAMID



Included in the hard copy version of this packet are the following articles from the Center on the Social and Emotional Foundations for Early Learning. (2003). *Promoting social & emotional competence*. Champaign, IL: Author. Retrieved May 29, 2005, from <http://www.vanderbilt.edu/csefel/modules-archive/index.html>

- Building positive relationships with young children, Module 2, Handout 2.2
- You've got to have friends, Module 2, Handout 2.3
- Enhancing emotional vocabulary in young children, Module 2, Handout 2.4
- Helping young children control anger and handle disappointment, Module 2, Handout 2.6
- Strategies for teaming with families in the process of PBS, Module 3b, Handout 3b.3a

Susan L. Jack, M.Ed. & David P. Lindeman, Ph.D.

June 2005

Kansas Inservice Training System

Kansas University Center on Developmental Disabilities

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In the work titled *Digital-Age Assessment: E-portfolios Are the Wave of the Future*, Tuttle (2007) writes about the shift from paper portfolio systems to electronic ones as being the trend. Certainly the use of electronic portfolios in higher education is a trend that is being implemented in programs nationwide. The synthesis of these portfolios for program purposes requires a great deal of thought and planning. A well developed plan of implementation and the right scaffolding of support are important to have in place before the faculty and students begin to use the electronic portfolio system. Moores and Parks (2010) concluded that “E-portfolios are receiving recognition and are being considered important by those in education and employment, including policy makers.” (p. 46)

The Accelerated Post Baccalaureate (APB) program at Bridgewater State University has adopted an electronic portfolio assessment to be completed throughout the program. The APB is a secondary teacher preparation program in Massachusetts. Students in this program are taking pedagogy courses at the post baccalaureate level to earn their initial license to teach at the middle school or high school level. Forty percent of the students in the program are currently teaching under a waiver or preliminary license. Most of the students are coming into the field of education as a career change. The mean age of students in the program is 37 years old.

The age of the students is an interesting part of this particular situation because there is a mix of what Prensky would call Digital Natives and Digital Immigrants. In his seminal 2001 work on this subject Prensky wrote that, “Today’s students- K through college- represent the first generation to grow up with this new technology. They have spent their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and all the other

toys and tools of the digital age” (p. 1). Ten years later this divide is still evident. Earlier it was mentioned that the average age of the students in this program is 37. There are typically two groups of students that make up this group. One group is in their twenties. They are either right out of their undergraduate programs, or have gone into another career for a short time and are going back to school to become a teacher. The other group are mostly in their forties or fifties, and have had significant time spent either raising a family, or in another industry. Anecdotally the former are almost exclusively digital natives, the latter mostly digital immigrants. This leads to different perspectives in many topics that are faced in teacher preparation programs, but also in how they face the electronic portfolio assessment system to be described shortly.

The main document regarding teacher education in Massachusetts is called the Pre-service Performance Assessment (PPA). The PPA is a set of five standards upon which teachers are judged to be worthy of teaching in Massachusetts. The PPA is similar to instruments used in most states for accredited teacher education programs. The standards include planning of units and lessons, delivery of effective lessons, and managing classroom operations among other skills determined to be important for teachers to possess. Each of the five standards has a number of indicators specifying what evidence is being sought for the teacher candidate.

The program’s task is to help the student acquire all of these skills to an acceptable level before certifying that the candidates are ready to be a teacher in the field. Throughout the program artifacts of evidence are collected of the candidate’s acumen in each standard. By the completion of the program, which culminates in a practicum experience, the candidate must demonstrate an acceptable level of ability in each area.

Before the implementation of the electronic portfolio evidence was collected with the same goal in mind but in a three ring binder. The three ring binder was evaluated only at the end of the

program. It was purely a summative assessment. It was the desire of the faculty involved in the program to be able to make the assessment better, and to be able to transform it into a formative assessment as well. The University of Maryland Eastern Shore has implemented an electronic portfolio in some of their programs “that is used for both summative and formative assessment as well as to encourage students to engage in deep learning and self reflection.” (Buzzetto-More, 2010, p. 62) Certainly these engagements in deep learning and reflection are desirable for teacher candidates.

In the old process there was little understanding of the students about the connection between the PPA and the portfolio. The paper versions of the portfolio usually contained a great deal of artifacts that weren't the student's own work, but rather things they had collected over the duration of the program. It was cumbersome to share and get timely feedback using the old three ring binders. Because most of the students didn't make this connection, they were not prepared to provide evidence for the PPA at the end of their experience in the program and found themselves scrambling in the final weeks of their practicum to find some evidence they could include in hopes of meeting the standards. The new model using electronic portfolios made it easier to share the artifacts in the portfolio regularly throughout the process, and with multiple viewers simultaneously. As a result the electronic portfolios of evidence are much more connected to the standards of good teaching.

In order to implement this change there were several things that had to be done behind the scenes. First of all a consensus had to be built about whether this is the direction that we wanted to proceed. “Building a critical mass for a change from paper to E-portfolios requires a commitment by instructors, students, and administrators.” (Woelfel, Murray and Page, 2010, p. 179) The heavy, cumbersome, three ring binders were not particularly appealing to the students

that had to build them, nor the faculty that had to read and evaluate them. It was thought of by many involved to be a task that was an exercise to be completed, rather than a valuable formative assessment where the students were learning as they completed the portfolio. Then there was the issue of what to do with the binders after completion of the program. The University had to have access to the data in them for accreditation purposes, and the students wanted to use the work that they had done to show potential employers the work that they were capable of.

Getting most people on board with the decision to move to electronic portfolio systems wasn't too difficult for the reasons above. There were some that were resistant at first because of academic freedom issues. In 2008 Studler and Wetzel wrote, "Expectations that faculty participate in teacher candidates' portfolio assessment can be viewed by some as a threat to their academic freedom." (p. 136)

The academic freedom argument that we confronted here was more about how the information was collected. Some faculty, many of whom would likely be determined to be digital immigrants by Prensky, were concerned about their ability to use the technology effectively for their students. This was overcome by exposure to the interface that was chosen at multiple meetings and promises of high quality technical support.

The next thing that had to be considered is what system to use. This choice was made easier because simultaneous to the APB's push towards the electronic portfolio a University-wide task force was convened to adopt one electronic portfolio system for the University. It made sense to adopt the system that was chosen by this task force since it would mean increased access to technical support. The electronic portfolio solution was tested with a cohort of the program and deemed to be reasonable for the goals of the PPA documentation.

An Wilder discuss “the need for encouragement and backing of the administration is crucial” (p. 88). Since the administration was a part of the task force that chose the solution, this support was embedded in the process. “The administration needs to provide the resources for technical support and comprehensive advisement” (p. 88) as well. Technical support was provided both by members of the faculty and the IT department on campus. Course releases were given to provide this support and to help other programs that wanted to adopt electronic portfolios in their own gathering of student information.

The institution of the electronic portfolio brought with it several program changes as well. An effort was made to get all of the faculty teaching in the program to stress to the students the connection between the evidence that they are collecting beginning on the first day of the program, the PPA standards, and the overview of the program. The decision was made to assess the electronic portfolio at least four times during the program. The first couple of times the electronic portfolio is assessed it is done so in a purely formative manner. The attempt is made by the faculty to help the students take ownership of collecting evidence of their meeting the PPA standards. It was also the hope of the faculty that these early accesses to the electronic portfolio would be where technical issues could be addressed.

The use of electronic portfolio systems can be challenging for all students, even the digital natives. Although the digital natives have used technology their whole life, they haven’t necessarily used it in this way. Technology is a familiar tool for them, but the task might not be familiar at all. Often students have never had the experience in their prior schooling of being assessed in this manner, and need to be given the opportunity to develop this skill. Vygotsky (1997) writes about phenomena called apperception. He defines apperception as the profound effect that our past experiences have on our current experiences and how they are perceived.

Vygotsky stresses the important role that teachers play in formulating the future educational path of the student. As someone is taught is likely how they will teach another person. By exposing the perspective teacher to this form of assessment it is more likely they would use something similar in their own teaching.

The faculty and advisors need to provide support, while resisting giving in to the students' desire to have the task defined too specifically for them. The process by which the student identifies evidence that is worthy of inclusion in their portfolio is part of the assessment. The development of this skill is an important one. If our teacher candidates don't get exposed to other types of assessment, they won't be as likely to use them in their own teaching.

In addition to the formative assessment of the portfolios throughout the program and the practicum experience, the electronic portfolios are also assessed in a summative manner at the end of the program. A rubric was developed for the PPA that is used as the final assessment for the program at the completion of the practicum experience. The rubric is on a scale of 1-4. Students approaching a rating of 1 are given extra support to attempt to avoid a negative conclusion to the practicum experience. The identification of the need for this additional support is helped by the accessibility of their evidence provided on their electronic portfolio. Before this, the identification of such a need was only seen in the observing of their teaching when the faculty were visiting their classrooms. With the increased access of the electronic portfolio system there are several times in the practicum experience alone that a need for additional scaffolding can be identified.

Electronic portfolios are used by many candidates as they seek employment upon completion of the program in addition to building their evidence of teaching ability. This dual purpose has some concerned. Carney (2002) found that portfolios that are used for multiple purposes often lead to none of the intended results being done well. To mitigate this potential



issue we attempt to coach the students to put artifacts of evidence that are appealing to multiple audiences. Specifically they are directed to look at the portfolio as a place to put their best evidence of meeting the standards in the PPA. Their best work would then also be what they would want to share with a potential employer.

The ability of multiple people to have access to the electronic portfolio was thought of as helpful. The electronic portfolios are web based so they can be viewed by perspective employers, faculty and peers if they so choose, all at once. The fact that it is web based is very helpful in getting feedback from these parties simultaneously.

One of the intended advantages of using the electronic format to collect this evidence is giving the students experience with both non-traditional assessment, and with standards based assessment. These are experiences that are often missing from their experiences as a student. It is hoped that as they are taught, they will eventually teach their own students. The faculty in the APB program strives to model effective and varied teaching strategies in their own instruction, a model that would be beneficial in light of Vygotsky's apperception theory discussed earlier.

A secondary benefit of moving to the electronic version of this assessment is the development of technology skills in our candidates. This is particularly important in our digital immigrant students. They are forced to confront any technology phobias that they have. With the increased integration of technology into the K-12 classrooms in recent years, this is an important skill to develop. Another benefit of this interface is that it is environmentally friendly. All submissions of evidence, as well as the assessment phases, are completed online. No paper is printed out until the five page summary and evaluation form at the very end of the program that required signatures. Also, having the collection of this evidence done electronically, it is much easier to cull together for accreditation purposes. Instead of having a room full of evidence when

the program is being evaluated, the evidence can all be accessed electronically saving time, space and paper.

Through this experience of moving this assessment online we have found that there are several needs for a successful electronic portfolio implementation. Perhaps most importantly that technical support is readily available to both faculty and students. The technical support personnel must be very comfortable with the specific medium being used. If this is not in place in a dependable way, it will only serve as leverage for those that are less comfortable with the use of the electronic portfolio, or technology in general, to attempt to derail the transition. Woelfel, Murray and Page (2010) state that the “commitment needs to be supported by timely troubleshooting” (p. 179). Fortunately we had an excellent technology team member in place, along with experienced faculty sharing their expertises that were incredible sources of support for all parties involved.

After initial trepidation by some, the feedback from all parties has been positive in nature. The challenges that were shared were either a matter of misconceptions about the ability of the electronic portfolio system to be able to accomplish the task or the desire to see a more streamlined portfolio template put into place. Some of the comments included in the misconceptions were that:

1. *Having to upload one assignment at a time was a challenge. It would be easier to be able to upload 4 or 5 files at a time.* This actually is possible, and many students did this successfully, but clearly this student didn't get enough direction to realize that this was an option.
2. *It is sometimes difficult to organize documents properly while including descriptions for each artifact.* There is a narrative section available for students to make the connections

between the artifacts of evidence and the standard they are attempting to meet. This particular student didn't use the narrative section.

Some of the comments about the portfolio template included:

1. *I experienced overkill.....it was exhausting opening up so many files for each standard.* In order to address this concern we are going to use one folder for each standard and limit the number of files that students are allowed to upload to each folder. This will require the student to determine their best evidence rather than uploaded everything that they can find that might fit.
2. *It would be beneficial to have more formal training early on in the program.* In future semesters there will be on campus training sessions outside of class time. For this initial implementation the training has been done as a segment of a class meeting or individually.

Students and faculty were also asked about the benefits of the electronic portfolio system.

Some of the comments about the benefits included:

1. I believe that the electronic portfolio system will help a student land a teaching job; a potential employer can see a candidate's work.
2. It was an easy way to organize evidence that I needed to collect.
3. I don't have to carry around thick binders any more.
4. It's nice to have a vast amount of information in one electronic application so I don't have to worry about losing my work.
5. The electronic portfolio system looks sleek, professional and expensive. Students conclude that because the APB uses it, they must be a with it program and want to be a part of it.

There were a few things that we didn't consider as part of the original pilot and implementation that we had to put into place after the fact. The original cost of the pilot

implementation was taken on by the college of education at our university. In order to sustain the project we had to switch to students paying for an account on their own. The cost of this account was offset by the removal of one of the textbooks from the program requirements. The other major concept that was not included in our original plan was the consideration of work load issues for faculty. The larger the electronic portfolio project gets, the more time that is needed on the faculty end. The school has decided to provide additional course releases for key faculty members to take care of such issues.

Although the process took a couple of years to implement the program is happy with the result. The electronic portfolio provides a tool that is helpful for the students both in acquiring their initial license to teach at the high school or middle school level, and as a resource for seeking employment. The ability for a potential employer to click a link and see a great deal of work that the candidate completed in their teacher preparation program is a useful tool for them to understand the level of preparation of the teacher. As a common thread throughout the program, this assessment has helped us to align our conceptual framework, and connect every part of the program. It is my hope that sharing the process that we went through to build this program will help other programs that might be investigated the implementation of electronic portfolio systems and how it could impact the quality of teachers that they are preparing.

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## **The Teaching Power in Environmental Print**

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### Introduction

Environmental print is the print found in the natural immediate environment of children, which includes logos, labels, road signs, billboards, clothing labels, coupons, newspaper advertisements, and fast food paraphernalia. Young children often engage in “reading their environments” before actually encountering experiences with print in books. According to Clay (1993), young children explore the details of print in their environments, resulting in children understanding more advanced concepts about print emerge from children’s earlier understandings. In a joint position statement of the International Reading Association and the National Association for the Education of Young Children (NAEYC, 1998), the statement conveys the notion that highly visible print labels expose young children to make a realistic connection between written language and communication tools exposes young children to a variety of print experiences and the sole purpose of reading for practical, realistic purposes.

## Background

Over the past several decades, reading researchers have investigated the influence of environmental print on young children's ability to read. Many researchers have concluded that learning about environmental print helps young children learn to read (Cronin, Farrell, & Delaney, 1999; Harste, Burke, & Woodard, 1984; Kuby, Aldridge, & Snyder, 1994). These same researchers further noted that young children are very adept at reading environmental print in its full context. For example, the vast majority of children can name McDonald's when shown a picture of the restaurant.

Young children are exposed to literacy through everyday events that occur in children's homes, schools, and communities. Duke & Purcell-Gates (2003) promoted the ideas of incorporating environmental print in young children's classrooms to enhance their motivation and knowledge about reading, writing, and oral language. According to Reutzel, Fawson, Young, Morrison, & Wilcox (2003) "using environmental print to teach children to read may not only help them learn to read but may form a bridge from known to the new" (p. 160).

Experiences with environmental print help children make connections between the informal literacy experiences they have at home and the more formal ones they engage in at school. Children construct their own knowledge of print through interactions with familiar logos and product labels. At the same time, teachers can use these kinds of materials in an instructional manner to create a transition from reading logos to reading words. Ultimately, this knowledge assists children in developing the basic concepts of print (Xu & Rutledge, 2003). Literacy development is a purposeful activity, involving children in ways of making, interpreting, and communicating meaning with written language.

## Connecting Theory to Practice

So, what exactly is necessary for children to become aware of the individual symbols and sounds of environmental print logos? How will young children attend to the letters and sounds in environmental print? How can young children process this guided exposure to environmental print transfer to conventional reading (Roskos, Christie, & Richgels, 2003)? All of these questions are targeted to areas teachers are exposing children to using environmental print. How are they utilizing environmental print in the classrooms of young children to overall impact children's connection to print? But a more trivial question is how do teachers learn and prepare to teach environmental print? These questions should become a part of what elementary education undergraduates are learning in their early literacy courses (Kuby, Aldridge, & Snyder, 1994; Copple & Bredekamp, 2009).

Young children often relate written words to the sounds they make even before they have learned conventional reading abilities. Undergraduates are learning how to use environmental print as part of children's early literacy experiences to build on the skills children have already developed and convey to them that reading is a valuable skill (Roskos, Christie, & Richgels, 2003). As undergraduate students begin pondering whether or not to intentionally include environmental print activities in their future classrooms, they should be reminded and provided with information on how teachers can provide opportunities for children to connect their prior knowledge to literacy experiences in school. Experiences with familiar print assist young children with word recognition skills and provide them with a sense of ownership when they recognize logos and product labels they see daily. But the most powerful tool that can be bestowed upon undergraduate students is for them to actually participate in hands-on activities and "lectures" to fully comprehend how to utilize environmental print in many different ways (Mashburn, 2008).



Environmental print is also a "sure-fire" method for any future teacher to use as a foundational basis because environmental print is everywhere and is a natural starting point to teach young children to read, write, and do math. Young children have a concrete connection to their interests and backgrounds; consequently, environmental print bridges the gap between the functional print of school and the print outside (Ramey & Ramey, 2004). What is even more astounding is that for future teachers to consider using this method in their future classrooms or want "to test the waters" during their practicum and internship experiences, environmental print does not cost a lot of money to use.

As undergraduates are being steered toward valuing the need of environmental print, they also need to fully embrace they have multiple roles in creating and maintaining a print environment by

- providing time and opportunity for multiple literacy activities throughout the school day (Bredenkamp & Copple, 1997; Copple & Bredenkamp, 2009).
- modeling reading and writing daily (Geist & Baum, 2005).
- introducing children to a wide variety of literature and genres (Pritchett, de Atilas, & Park, 2003).
- listening to children read and reading to children (Mashburn, 2008).
- working with students during writing time by being a model of writing (Ramey & Ramey, 1999).
- arranging print displays that are at the children's eye levels (Roskos, Christie, & Richgels, 2003).

- including books and writing materials in a variety of learning centers and places throughout the classroom (Roskos, Christie, & Richgels, 2003; Geist & Baum, 2005; Copple & Bredekamp, 2009).

Environmental print can be included in every facet of the curriculum for independent, small-group explorations (Bredekamp & Copple, 1997; Copple & Bredekamp, 2009). Undergraduates should be provided with numerous opportunities to literally engage in concrete, environmental print lessons. Undergraduates benefit the most when they literally manipulate materials and have a first-hand outlook on how the children's hands-on opportunities are springboards for children to think and process their worlds constructively. Some of the most effective hands-on activities for undergraduates to manipulate are

- Memory Game – A child places eight to ten cards face down. Then, a child turns over two cards at a time and matches a logo with its beginning letter. This game is designed to draw children's attention to beginning letters and decontextualized words (MacDonald, 2010).
- Letter Envelopes - A child sorts logos by beginning letters. Three envelopes are labeled with different letters. The child places logos in the corresponding envelopes. Again, this game focuses on young children identifying initial consonant and vowel sounds (Early Literacy I students, personal communication, October 26, 2010).
- Environmental Print Puzzles - The child will use cereal, muffin, cake mix, cracker, and cookie boxes to make great puzzles, strengthening fine motor skills and an intense exposure to identifying letters (Early Literacy I students, personal communication, October 26, 2010).

- I Can Read! - The child will have an assortment of environmental print cards and can use them to match words and pictures; sort cards by beginning sounds, syllables, categories, such as candy, restaurants, cereals, etc. (MacDonald, 2010).
- Eat the Alphabet Book - A child collects environmental print of foods that can be eaten and put the logos and pictures next to the corresponding alphabet letter (MacDonald, 2010).
- Writing in My World - Small groups of children can write a class story, using two or three examples/logos of environmental print. Young children need writing to help them learn about reading; they need reading to help them learn about writing; and they need oral language acquisition skills to learn about them about both (Roskos, Christie, & Richgels, 2003).
- Going Shopping! - Small groups of children will create a grocery store, using coupons and newspaper ads for pretend shopping at the grocery. To further enrich or enhance the lesson, the children should place newspaper ads on the wall around the "new" grocery store (Early Literacy I students, personal communication, October 26, 2010).
- Neighborhood Map - The child will label a map of their neighborhood with familiar print to develop the alphabetic principle and encourage phonological awareness. The child will place photos or cutouts in appropriate locations to label the stores, roads, and buildings. Ask the child how he/she was able to identify certain words. Also, ask him/her to name the beginning letters he/she sees, and the sounds these letters represent (Early Literacy I students, personal communication, October 26, 2010).
- Environmental Print Walk - The children take a field trip around the school, to other classrooms, to the parking lot, around the neighborhood, and to local stores in the

community to find labels and signs and for children to gain first-hand experiences in literally reading their worlds and making a realistic approach to constructing a cognitive anchor for mapping sounds onto written code symbols. The high-impact environmental print symbols are the first exposure young children have to the code system of written symbols (Early Literacy I students, personal communication, October 26, 2010; Ramey & Ramey, 2004).

Adult instruction is the key element to effectively using environmental print to teach emergent reading skills. When an adult draws attention to the letters and sounds in environmental print words, young children are more likely to transfer this knowledge to print now without graphics (Neuman, 2009).

Undergraduate elementary education majors, who derive at the conclusion that there is significance value in using an eclectic approach to reading by exploring environmental print must also understand how to intricately integrate it to the standards and frameworks of a state's benchmarks (Pritchett, de Atilas, & Park, 2003). The reasoning and application of processing environmental print in the form of a lesson plan can be easily created and implemented. The success of any lesson, even one as simple as environmental print, is careful preparation. Utilizing TaskStream lesson plan formatting, lesson plans are derived from the highest quality web-based software and supporting services to efficiently plan and manage assessment and accountability processes; facilitate the demonstration of learning achievement; and foster continuous improvement (TaskStream Advancing Educational Excellence: Web-Based Solutions to Advance Educational Excellence, n.d.). The following lesson plan was created for a pre-kindergarten classroom where an undergraduate student is teaching a lesson on environmental print:

## VITAL INFORMATION

|                        |   |
|------------------------|---|
| Subject(s)             | Language Arts (English)   |
| Topic or Unit of Study | Environmental Print   |
| Grade/Level            | Pre-K   |
| Objective              | The learner will identify functional print in the environment and identify the sounds made by the letters to develop the alphabetic principle and encourage phonological awareness.   |
| Summary                | The learners will be introduced to signs and other familiar environmental print through books and galleries in Internet websites. The learners will have numerous opportunities to practice their reading skills and view themselves as competent readers and users of print. |

## IMPLEMENTATION

|                  |   |
|------------------|---|
| Learning Context | <p><b><u>Prior Knowledge:</u></b></p> <p>The learners will have been introduced to signs and other familiar environmental print. The learners will have also had opportunities to bring in examples of environmental print and share them with their peers.</p> <p><b><u>Application:</u></b></p> <p>The learners will begin to identify individual letters of the alphabet; to read words and short phrases; and to write words.</p> |
| Procedure        | <p><b><u>Anticipatory Set:</u></b></p> <p>The teacher will take the class on an environmental print walk around the school campus/neighborhood to look for functional print, such as traffic signs; restaurant logos; etc. The teacher will also take the learners outside to the school marquee; street signs; and other signs in the area.</p>  |

**Teaching the Lesson:**

The teacher will take pictures with a digital camera as the learners identify functional print. Simultaneously, the teacher will also focus on how many examples of functional print the learners can easily identify. The teacher will ask the learners to "read" the different signs and artifacts they observe during the environmental print walk. The teacher will help the learners, who may have difficulty with some of the functional print by helping them to connect the functional print with a place, an experience, and even an advertisement they've had an encounter with in the past.

**Guided Practice:**

Upon returning to the classroom, the assistant teacher/adult classroom helper will print the pictures, and the teacher will discuss them one-by-one with the class. The teacher will assist the learners in developing word recognition and fluency skills by asking them to identify the beginning letters of the words found and the sounds these letters make.

The teacher will then demonstrate for the learners how to use the words on the items that have been brought in by drawing the learners' attention to the letters and sounds. For example:

How do you know this picture says **bus**?

What letter do you see at the beginning?

What sounds does the letter **b** make?

Is that the sound you hear at the beginning of the word **milk**?

What is another word that begins with the sound **b**?

The teacher will assist the learners in slowly segmenting the sounds made by each environmental print word and have the learners recite the letter for each sound. The teacher will draw the learners' attention to the different sounds that the same letters can make. For example:

What are the sounds you hear in the word **bus**?

What sound does the **u** make in **bus**?

**Independent Practice:**

The learners will make their own environmental print books. The learners will have to identify and pronounce the environmental print word or words. Then, the learners will add captions, write sentences, or use words/phrases for each image.

**Closure:**

The teacher will model completing this task with the first image. For example, if the image is of the school's sign, the teacher would write, "I am a teacher at Triplett Elementary School." The teacher will solicit participation from the learners, by asking them to compose the captions for other images. The teacher will circulate and assist the learners in folding and cutting their pages to create an environmental print book.

Differentiated  
Instruction

**At-Risk Learners:**

The teacher will request the learners and their families to bring in examples of things they can read. The learners will have an opportunity to participate in Show and Tell and share their examples of environmental print.

**Exceptional Learners:**

The learners will assist the ELLs by scanning their pages into a HyperStudio stack to make a slide show for the children to use at the computer and to post on the school website. In addition, the learners can assist the teacher in creating a big environmental print book, explaining where the additional print items were found, and the messages they communicate.

**English Language Learners:**

The teacher will take pictures of restaurants and stores of the local community. The teacher will assist the learners in creating a riddle book. On one side of the page, the teacher will assist the learners in displaying a picture of Ronald McDonald, a happy meal sack, or a picture of a toy from the happy meal sack. On the reverse side of the page, display the picture of the actual McDonald's restaurant from the actual neighborhood with its sign and golden arches. The teacher will play a game, allowing the learners to look at the pictures and guess the name of the restaurant, for example, by naming the letters on the sign, sounding words aloud, and doing other phonemic awareness activities.

**SPED Learners:**

The teacher will ask the learners to identify specific words in the environment by asking the following questions: Is this the boy's bathroom or the girl's bathroom? The teacher will spend time with the learners, helping them with simply recognizing their letters of the alphabet.



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|--|---|
| <p>Sample Student Products</p>             | <p>The environmental print books are saved from year- to-year as a permanent part of the classroom library.</p>       |
| <p>Collaboration</p>                       | <p>Students will work collaboratively and individually. Students will work in groups of no more than four people.</p> |
| <p>Time Allotment</p>                      | <p>One Class Period for 25 Minutes</p>  |
| <p>Author's Comments &amp; Reflections</p> |   |

## MATERIALS AND RESOURCES

|                                |  |
|--------------------------------|--|
| <p>Instructional Materials</p> | <p>Copies of Digital Pictures</p>  |
| <p>Resources</p>               | <ul style="list-style-type: none"> <li>• <b>Materials and Resources:</b> <ul style="list-style-type: none"> <li>different types and colors of paper</li> <li>stapler</li> <li>scissors</li> <li>glue</li> <li>digital camera</li> <li>markers</li> </ul> </li> <li>• <b>Technology Resources:</b> <ul style="list-style-type: none"> <li>HyperStudio; Internet</li> </ul> </li> <li>• <b>The number of computers required is three.</b></li> <li>• <b>Students Familiarity with Software Tool:</b> <ul style="list-style-type: none"> <li>Word Processing</li> <li>PowerPoint</li> </ul> </li> </ul> |

## STANDARDS & ASSESSMENT

|                  |   |
|------------------|---|
| <p>Standards</p> | <p><b>Mississippi Pre-Kindergarten Benchmarks</b></p> |
|------------------|---|

|                           |   |
|---------------------------|---|
|                           | <p><b><u>Subject:</u></b><br/>Language Development</p> <p><b><u>Grade/Course:</u></b><br/>Pre-Kindergarten</p> <p><b><u>Strand/Goal:</u></b><br/>Demonstrates an Awareness of Print</p> <p><b><u>Competency:</u></b><br/>Recognizes Local Environmental Print</p>   |
| <p>Assessment/Rubrics</p> | <p>There are many facets of assessment being utilized in this lesson:</p> <p>The learners will self-assess as they read and reread the books they have created individually, in pairs, or in groups.</p> <p>The learners will also take their environmental print books and read with parents/adults at home and/or other adults at the school.</p> <p>The teacher will observe and evaluate students' ability to identify the letters and sounds in the functional print pictures that were used to create the learners' individual booklets. The teacher will utilize a checklist with each student's name with a list of the letters of the alphabet and a list of the sounds.</p> |

Conclusion

Undergraduate students/future teachers, who believe in scaffolding children to read and write in their worlds, should definitely include environmental print activities in their classrooms

that provide opportunities for young children to connect their prior knowledge to literacy experiences in school. Children begin to recognize words and feel a sense of ownership when they recognize familiar logos and product labels (Copple & Bredekamp, 2009).

Adult/child interactions with environmental print are particularly effective in helping children make the transition from seeing logos as merely graphics to seeing them as graphics that contain letters that form words and eventually sentences. Environmental print clearly has a place in intentional teaching. It can be a bridge between emergent reading and alphabetic decoding. Print in the real world such as signs, billboards, logos, and functional print offers many literacy opportunities for future teachers to help children connect sounds to meaningful letters, words, and text. Ultimately, children will also experience constant reinforcement of class lessons through their daily encounters with environmental print in the community.

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