Defining environment as both the physical space and the people who are in it, this paper explored the effects of environment on a first-grade child. Urie Bronfenbrenner's theories on the effects of physical environment on children provided a conceptual foundation during the observation of Christy, a student at Lawrence School in Brookline, Massachusetts. The focus of the observations was on adult and peer modeling, as well as the effects of structure and positive reinforcement. Christy's behavior and attitude improved when she acquired a friend, a positive effect of peer modeling. Differences in behavior between regular classes and "specials" (gym and music) were attributed to differences in structure, teacher/student relationship, and individual versus group goals. Christy was regarded as a "gray" child, that is, one who would not demand attention due to behavior or attitude and therefore could be overlooked, underappreciated, or left on her own for advancement. The conclusion drawn from these observations is that "gray" children do better in a structured environment and that extra help in a classroom provides a nurturing atmosphere that is beneficial to such children. (MT)
How Has the Environment Influenced Christy's Growth?

Presented at AERA Conference
in Chicago, Illinois;
March 1997

By Blair E. Roberts
1060 Harbor Road
Southport, CT 06490
(203) 254-2773
INTRODUCTION:

Urie Bronfenbrenner conducted research on the effects of the environment on the growth and development of children. He studied and compared these effects between the United States and the U.S.S.R., in his book *Two Worlds of Childhood*. He studied the effects of positive reinforcements, modeling behavior, peer models versus adult models and other similar studies. I was interested in investigating his research while conducting some of my own. I was interested in his studying the use of modeling between both peers and adults, positive reinforcements and how these types of notions differed between the classroom environment and the environment of the gym and music, the specials. In this research, I define environment as both the physical space and the people who are in it. To determine the effects, I studied a small girl born in 1989 and in one of the three first grade classrooms at the Lawrence School in Brookline, Massachusetts, named Christy.

Christy came to school with many of the skills that other children in the classroom possessed, she reversed her numbers and letters and could not yet read. On the first day of school, Christy clung to her mother who was torn as to which classroom she should be in due to the split-up of her daughters, Christy has a twin who was across the hall in another of the first grade classrooms. Once the day got under way Christy was able to say good-bye to her mother without hesitation, as she too got caught up in the excitement of first grade!

I chose Christy as a child to observe because she is a gray child, a child who would not demand your attention due to behavior or attitude and therefore might get overlooked, under appreciated and left on her own for advancement in both academic and social situations. I was interested in
observing Christy and the ways in which the environment of the classroom and the people around her impacted her. Bronfenbrenner, an ecological theorist, believed that the environment had a great impact on the individual. I defined environment as including both the physical space and the people who are in it. I wanted to closely follow a child and track the interactions that Christy had with her environment, for example-how she used the environment for support and in turn how the environment supported her.

The classroom, in which Christy was placed, had seventeen children, one teacher and one student teacher. The methods of instruction followed a whole language approach with a supplementary phonics instruction curriculum. Children were told to work at one's own pace and not to worry about what one's neighbor was doing. Assignments were given out on an individual basis and as this was the beginning of the school year, children relied solely on the teachers for assistance. The degree to how much the children were encouraged to work depended on their capabilities.

The physical environment at Lawrence School, in general, is very welcoming and inviting, with bright paints and open developmentally based classrooms. The classroom was very inviting to the eye with the children's work up everywhere for all to see. The walls did not continue all the way up to the ceiling so the buzz of children could be heard throughout the school.

METHODS:

My observations were based on anecdotal records, running records, and a specimen record as well as two small questionnaires that each child
answered one on one with an adult about first grade and a conference report filled out and shared in parent conferences.

I studied Christy at a variety of activities outside the classroom, such as specials, as well as inside the classroom to determine what effect the environment placed on her. I observed Christy at gym, music, all classroom activities, and outside activities such as walks done with other classes. For all the activities inside the classroom, both Alicia (the lead teacher) and I were there.

For the specials, gym and music, there was one teacher and I merely observed, refusing to answer the children's questions when they came to me instead of to the teacher by saying that I was not the one in charge, Mr. or Mrs. _____ was. The materials involved for music and gym were completely up to the teacher in that special. I watched the children play games involving rhythm and patterns in music and playing physical games in gym-exercises, such as circles with your arms, jumping jacks, and games such as Wall Ball.

Music and gym are specials that they travel to twice a week. The music classroom is large and prepared at all times for older children, evident by all of the desks and the risers which the first graders do not need. The gym is a large open space with all of the materials off to one side, such as gymnastic equipment, mats, cones and balls; this leaves the majority of the gym ready for games and stretches. What I saw while visiting the specials, was that, the children did not act the same at the specials as they did in the classroom; they did not try as hard, they did not show the same amount of respect, and they could get very emotionally fragile during these times. It was at the specials that the children were reprimanded the most, asked to leave the activity or leave the room.
entirely. The physical environment differed greatly from that of the classroom but also the teachers in those specials had different approaches toward the class than what the children were accustomed to in the classroom. The teachers in the specials treated the children differently and modeling was not as extensive as that utilized in the classroom. For example, the gym teacher would typically stand while having the children sit in front of him and sway on his heels with his hands on his hips, looking down at the children while giving out instructions. The music teacher was typically sitting behind the piano and therefore partially concealed by many of the children while trying to give instructions. These were contributing factors that led to distraction and misbehavior coupled with the "off limits" of the room such as the gym equipment off to the side or the risers in the music room.

Structure is provided in the classroom in many ways such as by giving the children a set place to sit, such as specific lunch tables, or by providing the children with all of the materials that they will need for a project before they begin and modeling the expected behavior for that activity, such as talking with the people at your table or no mistreating the materials. Behavior and learning are modeled consistently throughout the day in every activity inside the classroom. Everything from how to behave at meeting to some anticipated reactions for something new that would be introduced. When one of us was leading a lesson or activity, the other would be reinforcing the children and reminding them of what was good and to continue. Also when working with the children Alicia and I both worked with the child on his/her level; we moved to where he/she was sitting and sat there with the child rather than asking them to come to us.
Besides the specials, I observed Christy's behavior, attitude and ability on the "Muddy River Walk". We went with another first grade with their student teacher, cooperating teacher and the principal, so in all there were probably thirty-four children and five adults. With an increase in children, there is more freedom provided for the children and a possible increase in frustration levels, especially when tasks are unfamiliar to what is typically done inside the classroom. While on this walk the children were asked to look for specific things such as a seed, a toothed leaf and a leaf with at least two colors. After they had found these three things they were instructed to find a spot and sketch what they saw in the natural environment.

Through this research I wanted to determine how supportive a physical environment and the people in it could be for the children in that classroom. I wanted to know how important it was to have a nurturing, supportive environment with clear goals and with supportive, visible adults for the children to rely on. I wanted to know if a gray child could succeed in both a structured setting such as the classroom as well as a whole group setting such as gym and music.

RESULTS:

Christy is liked by her classmates, but clearly has made the distinction that she enjoys the presence of some children more than others. Christy does not let herself get distracted by other children or what is near her. She is physically and mentally strong and capable of finishing what she has started.

Christy is rarely out of sorts and typically talks in a quiet calm voice. Christy's behavior fluctuates in the specials compared to that inside the
classroom. She expresses anxiety before gym but not before music, but it is in music that she gets distracted and uninterested by the activities, until she is verbally invited back in. At the beginning of the school year Christy always showed hesitation about gym and so I was eager to observe gym and her presence there. At gym, Christy smiles a lot and seems content, she eagerly participates in whatever is asked of her and seems very comfortable both in the setting and with the children and gym teacher. I was never able to visually see why her hesitation existed or why it stopped. It is difficult to admit that my presence may have had an outcome on her behavior and her being comfortable in an atmosphere where she expresses doubt and concern. I verbally questioned Christy about it, but she shrugged and did not want to offer more. There was a very clear shift from the classroom expectations to that of the expectations of the specials. There was the shift from a developmental individualistic structured atmosphere inside the classroom to that of whole group expectations and competition among the children in the specials. Inside the classroom, the children had been taught to move at one's pace and ignore the progress of other children. In the specials, behavior and activity expectations are not modeled to the degree that they are inside the classroom, and this can lead to distracting, disruptive behavior among the children. Also the teachers of the specials are adults that the children do not spend more time than an hour a week with and therefore the teacher's ability to provide structure, modeling or discipline is decreased because they are not seen as significant as the classroom teacher in the children's lives. I also think that since everyone went to gym, everyone was expected to adhere to the rules and do the activities no matter how awkward or frustrating the experience might feel. Until watching the children at gym, I had forgotten how stressful
certain environments can be due to what is expected and asked of you. Jumping Jacks are awkward and hard to do and many first graders have never done them before and yet they are supposed to do ten of them. The music teacher tries to make music calming with the use of her voice but her presence behind the piano leaves a lot of the children without the use of eye contact and therefore her words can have less meaning. Christy's anxiety has abated since then, especially since the addition of the seventeenth child to the classroom, Helen.

Helen and Christy bonded almost the minute Helen stepped in the door. While they were very close friends they made their own individual choices and were easily able to do things separately. The addition of Helen made Christy seem almost like a new child. She was as bubbly as before but now had a truly close friend and that seems to have made all the difference in the world in terms of her ability to speak up louder about situations that she feels uncomfortable in. In Bronfenbrenner's book Two Worlds of Childhood, he discusses the strong presence and benefits of peers in any child's life. He shows evidence of the positive effects that this power of modeling can have on a person who can identify closely with the model.

Christy is capable of doing all that is asked of her in and out of the classroom; she showed her good observation skills on the walk to Muddy River where she easily found the three objects and eagerly asked to look for more and the sketch assignment did not intimidate her. She is a very good listener and stops what she is doing easily no matter how much she may be enjoying it, whereas other children in the classroom can be more than reluctant. She is aware of where her body is in space and what is a comfortable space between her and her peers. Christy recognizes when she needs a teacher's help or assistance and seeks it out when needed, she is
capable of asking the person to stop whatever he/she is doing that is bothering her and when that attempt fails she easily comes to get an adult and can clearly explain why she needs assistance.

Since the beginning of the year Christy has grown so much in terms of social confidence and assertiveness as well as at trying new things. For example, for the first couple of weeks during free choice time, Christy repeatedly chose pets for the entire forty-five minutes and did not want to try anything different. However; by October, Christy was starting to branch out in her choices at free choice time. Who she played with at recess started to include more children as the year wore on as well.

Christy was also hesitant about tell shares, which a lot of children were, but still Alicia and I would encourage the children on an individual basis to tell a tell share. Christy was quick to shake her head when asked if she had a tell share at the beginning of the year, by November, however; Christy was bounding up to the special chair and telling elaborate tell shares that easily lasted ten minutes. The people in the environment provided support for the children so that change and trying new things seemed inviting and interesting rather than something to be wary of. Alicia and I role modeled and reinforced behaviors for the activities, and we talked with the children individually and as a class about concerns we could see in some of the children. Bronfenbrenner discusses in his book how influential reinforcement can be. He says that reinforcement affects the degree to which a person will respond to a model. Therefore past reinforcements have a direct effect on responses to future reinforcements.¹ We provided activities that were process based rather than outcome based

¹Bronfenbrenner, Urie. *Two Worlds of Childhood* page 131
and we continually helped children in a positive manner and with encouragement.

First grade is challenging for children, major differences existed in expectations for children in first grade than those that they had had in kindergarten. Children were encouraged to try to write something every day, which in kindergarten was not pushed as hard. Children were also learning to read which was very challenging and difficult for the majority of the class and made them hesitant to continue. Support was provided for these difficult changes by having a small teacher to student ratio when pressures such as reading occurred during the day. Teachers sat with the children at the tables, and read along with them at their pace to show support and remind the children that the teachers were there to help.

DISCUSSION:

It overwhelms me to see the observable beneficial effects that this environment has had on the individuals and their development. As a student teacher, I was constantly looking to more experienced teachers for advice, behavior modification and watching them in general to try to determine what led to the success or failure of that child. Many teachers have many different styles, some are nurturing and emotionally available while others are distant in the classroom instructing the children to work it out among themselves without the teacher's guidance. Watching so many different approaches to teaching, I was beginning to wonder how important it was to listen to the children, to sit with them, to touch them, to use caring and nurturing words. The more involved one becomes in teaching, the more tired one becomes physically. I believed in a nurturing environment but had begun to ask myself the question why. It was through
this research that I learned the why behind my question and in what type of environment gray children succeed most in.

The structured environment in the classroom did shape Christy's development. Christy succeeded more in a structured environment than in a whole group competitive environment. Christy recognized some of the support inside the classroom by looking to peers and adults for help in difficult situations and for support and acceptance at times of uncertainty. I would like to see the classroom continue to encourage Christy to display her emotions more frequently, rather than repress them. I witnessed Christy's anger at another child in the classroom more than once, although it was very infrequent. Her eyes flashed anger and her body language said as much as her words, which were quick and to the point "Stop it ____!". Despite her intense anger, she bounced back quickly into the Christy we were more familiar with. She is a very resilient child who forgives and forgets. I would like to see her behavior even out more so that these lashes of anger are not as sudden and intense. As Christy continues to feel comfortable in the classroom, she will be able to find a middle ground for all of her emotions. It would be beneficial to give her more guidance and reassurance after hurtful situations have arisen, which will give her encouragement for not only how well she dealt with the situation but also the strength to stick up for herself and her feelings again.

Christy likes a lot of choice and freedom to decide during activities and so the whole language approach will continue to leave a lot of room for creativity on her part in which she will continue to prosper. Christy is an important class member, the environment has helped her realize her boundaries as well as how to deal with her feelings and emotions. The physical environment has helped her because the room is broken down into
smaller areas and Alicia and I tell the children that if there is a problem to leave that area of the classroom for a while. The teachers have helped Christy by being there physically, listening and advising as well as asking her what she thinks is a good solution.

This research implicates that gray children succeed more in structured settings. Structured classrooms provide a more conducive learning environment for gray children. Future research that could be conducted could address these questions.
1. Do all gray children do better in structured settings or is there a gender division?
2. Do gray children need more structure than other children?
3. What other factors contribute to the success of gray children?

This research has a major implication for children and today's schools. This implication is the use of an extra person in the classroom, such as an aide, a student teacher or a volunteer. Everyday activities are made more successful by the presence of more than one person. People have the ability to impact and improve children's lives daily. Team teaching between classrooms would help if there is no one to help out in the classroom. Asking parents to become more involved physically in the classroom, rather than just for bus duty, or snack distribution would have immense impacts on the children. Combine activities throughout classrooms, work together as professionals, share responsibilities and count the increases in positive outcomes and benefits for everyone involved. This research has shown how crucial and effective all school environments can become with the help of extra people in the classroom and positive reinforcing people in those environments.
Bibliography

I. DOCUMENT IDENTIFICATION:

Title: How Has the Environment Influenced Christy's Growth

Author(s): Blair E. Roberts

Corporate Source: Wheelock College

Publication Date: 6/14/97

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

Check here for Level 1 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

Check here for Level 2 Release:
Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

The sample sticker shown below will be affixed to all Level 2 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: Blair E. Roberts

Printed Name/Position/Title: Blair E. Roberts/Teacher

Organization/Address: 1060 Harbor Rd.
Southport, CT 06490

Telephone: 203-2773
Fax: 203-9719

E-Mail Address: N/A

Date: 6/14/97
April 25, 1997

Dear AERA Presenter,

Hopefully, the convention was a productive and rewarding event. We feel you have a responsibility to make your paper readily available. If you haven't done so already, please submit copies of your papers for consideration for inclusion in the ERIC database. If you have submitted your paper, you can track its progress at http://ericae2.educ.cua.edu.

Abstracts of papers accepted by ERIC appear in Resources in Education (RIE) and are announced to over 5,000 organizations. The inclusion of your work makes it readily available to other researchers, provides a permanent archive, and enhances the quality of RIE. Abstracts of your contribution will be accessible through the printed and electronic versions of RIE. The paper will be available through the microfiche collections that are housed at libraries around the world and through the ERIC Document Reproduction Service.

We are soliciting all the AERA Conference papers and will route your paper to the appropriate clearinghouse. You will be notified if your paper meets ERIC's criteria for inclusion in RIE: contribution to education, timeliness, relevance, methodology, effectiveness of presentation, and reproduction quality.

Please sign the Reproduction Release Form on the back of this letter and send two copies of your paper. The Release Form gives ERIC permission to make and distribute copies of your paper. It does not preclude you from publishing your work. You can mail your paper to our attention at the address below. Please feel free to copy the form for future or additional submissions.

Mail to: AERA 1997/ERIC Acquisitions
        The Catholic University of America
        O'Boyle Hall, Room 210
        Washington, DC 20064

Sincerely,

Lawrence M. Rudner, Ph.D.
Director, ERIC/E

ERIC® Clearinghouse on Assessment and Evaluation