In the Head Start Public School Transition Demonstration Project, 32 demonstration sites across the country have extended Head Start-like services to help low-income children transition smoothly into the elementary grades. Preliminary evaluation of a demonstration program in two West Virginia counties suggested that Head Start students receiving transition services did not gain academically. In 12 schools, standardized tests of verbal achievement and basic math problem solving were administered to 290 students entering kindergarten and 243 students at the end of second grade. Students had received no Head Start services, Head Start only, or Head Start plus transitional services. Head Start participation had no effect on kindergarten results, and neither Head Start nor transitional services affected second-grade results. Ethnographic data collected by participant-observers during the program indicate that the project encouraged teaching practices that may be inconsistent with the standardized tests used to evaluate the program. Local staff development meetings (four to seven per year) focused on practices that are child-centered, developmentally oriented, and based on constructivist principles and teacher reflection. Although teachers were given few concrete recommendations about how to implement such practices, some shifted away from their former practice of "drilling skills" and teaching to standardized tests and became more passive in guiding children toward specific learning goals. The results suggest that it may be harmful to recommend developmental, constructivist education for low-income children with limited means of acquiring the dominant cultural knowledge that comprises standardized tests. (SV)
Developmentalism Meets Standardized Testing:

Low Income Children Lose

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Developmentalism Meets Standardized Testing - Low Income Children Lose

Introduction

For nearly 30 years, Head Start has been a major social reform effort which has attempted to break the cycle of poverty in the United States by enhancing educational opportunities for low-income children of preschool age. Since 1992, thirty-two sites around the country have gone a step further by extending Head Start-like services to help children and their families "transition" smoothly into the elementary grades. In a two county region of West Virginia, a state probably best known as an exemplar of Appalachian poverty, preliminary evaluation results of such a Transition demonstration program suggest that children who received Head Start and Transition services may not have gained ground academically.

Seeking explanations for these troubling results, we turned to in-depth qualitative data collected over a four year period to supplement the achievement test data on which the evaluation was based. Our examination led to no clear answers, but some intriguing questions. Might there have been academic gains if the provision of health and social services had been more concentrated? Might the scores have been different if parent involvement activities had been more related to children's academic development (Spatig, et al., in press)? These and other questions merit analysis.

In this chapter, however, we focus on questions related to the local project's staff development efforts with the children's elementary teachers. Historically, Head Start and other preschool programs have emphasized developmental, constructivist approaches to
teaching and learning. Increasingly, such an approach has been accepted by early childhood educators in public school settings. At the same time, the use of standardized tests has increased at a startling rate (Kamii, 1990) and it is possible that the two movements are incompatible (Stone, 1996). We examine the dissonance created by these two movements in the context of the West Virginia Transition. Is the nationally mandated evaluation's reliance on standardized achievement measures inherently incompatible with the type of developmental, constructivist early childhood program encouraged by the local project? If so, this is a disservice to Head Start and Transition programs and the children and families they serve. Perhaps even more important, is it possible that Transition inadvertently played a role in limiting educational opportunities of low-income children by seeking to optimize the development of each child irrespective of academic norms? If true, this is a disservice for low income children who have limited means of gaining access to the dominant cultural knowledge that comprises standardized tests -- tests which are tremendously powerful in opening or closing doors to high status education, skilled and professional jobs and other life opportunities.

**Head Start Transition in West Virginia**

Head Start research has a long and controversial history. The unanswered question which recurs most frequently - Under what conditions are Head Start effects lasting? - provides a compelling rationale for programs such as the Head Start Public School Transition Demonstration Project (Transition). Transition is a national study the purpose of which was to compare 32 different programs (each located in a different area in the U.S) designed to assist low-income children make a successful transition into public school. To accomplish
this goal, Transition demonstration projects were to provide low-income children and their
families with continuous Head Start-like services through the first four years of public
schooling. These services included health and social services, parent involvement activities,
and the provision of developmentally appropriate schooling experiences.

West Virginia as Context

It is not surprising that a Head Start agency in West Virginia was eager to become
involved in the Transition program in order to help improve the academic and life chances of
children. West Virginia's per capita income is among the lowest in the U.S. Hannah (1995)
reports high rates of poverty among West Virginia families. As of 1989, 26 percent of all
children in West Virginia lived in poverty, compared to 18 percent in the United States as a
whole. Nearly 40 percent of all students drop out before reaching the eighth grade (Bickel,
1989). Only 32 percent of West Virginia's high school graduates enroll in a college or
university, and the percentage of the state's population made up of college graduates is the
lowest in the nation (Bickel, Banks, & Spatig, 1991). Diversification of the state's economy
has been slow to occur. Ongoing outmigration of born-and-bred West Virginians in search
of improved prospects for themselves and their families is a source of continuing concern
(DeYoung, 1988). Those who remain are, too often, the least well educated and most likely
to be unemployed or underemployed.

Five demonstration schools and 7 control schools were selected in a two-county
region containing one of the state's largest cities as well as some of its most rural, isolated
areas. Poverty levels in these schools were high. For example, in four of the five
demonstration schools, between 70 and 80% of the students qualified for free or reduced cost
lunch. In an area of such great need, Head Start, as well as other programs designed to assist low income children, is highly prized. But is Head Start actually succeeding in improving the life chances of its participants? A great deal of research has attempted to answer this question.

**Head Start Research**

One crucial reason for the uncertain results of most Head Start evaluations is that, too often, they have been poorly conceived afterthoughts (Currie & Thomas, 1995). The *post hoc* character of such endeavors has guaranteed that essential data would be missing, undercutting the best efforts of even the most sophisticated statistical analysis.

Furthermore, Head Start evaluations have been captives of methodological tradition. Quasi-experimental designs have taken near-exclusive precedence over other approaches. As a result, ethnographic research on Head Start, especially in relation to academic success, has seldom been done and rarely reported. Consequently, results of evaluations of Head Start and related endeavors are typically couched in the language of psychometric outcomes, especially achievement test scores, and less frequently, measures of social skills.

While some of the quantitative research on Head Start has been characterized by state-of-the-art sophistication, its very nature prejudges questions as to what Head Start can and should do. As is too often the case in quantitative research and evaluation, sophisticated statistical tools have been applied in the presence of very limited knowledge as to the concrete social nature of the programs being evaluated.

**Evaluating the WV Transition Demonstration Project**

Design of West Virginia Transition's evaluation was intended to avoid these
difficulties by assuring that data were available to permit the interpretable comparisons needed to assess the efficacy of the program. This included not only a set of more or less suitable outcome measures, but a useful complement of statistical controls, as well.

This endeavor, of course, entailed comparison of Head Start participants who also participated in Transition with Head Start participants who did not participate in Transition. The evaluation is even more informative, however, since we were able to include children who have not participated in Head Start. In effect, this enabled us to include Head Start participation, Yes or No, as a categorical variable in our statistical analysis.

The Agency for Children, Youth and Families (the federal agency which administers Head Start) and the national Transition evaluation coordinators determined which outcomes and measures were employed. Data collection began with the onset of the program, and has proceeded in a well-organized fashion for the past three years. Sufficient, good-quality data on variables of interest are available to specify an informative quasi-experimental model to gauge not only the effectiveness of Transition but also of Head Start itself.

In addition, in an ambitious effort at triangulation, the traditional quasi-experimental work has been complemented by a sustained qualitative evaluation endeavor. Three full-time ethnographers, supervised by an experienced specialist in qualitative social research, have been on the job since early in 1992, involved in intensive documentation of program organization and functioning. They have spent hundreds of hours in schools and classrooms, observing and interviewing teachers and children; they have visited participants’ homes to interview parents and children; and they have become a credible source of formative evaluation insights for program administrators and other staff members.
Of special interest here, the ethnographers and those in the conventional quantitative evaluation effort have begun to collaborate. Ethnographic material has been invaluable in filling in the programmatic "black box" and providing richly detailed contextual information concerning the experiences of Transition participants. Qualitative data provided insights that may help to further explain and illuminate the disappointing results of the quantitative evaluation.

From Kindergarten Through Second Grade

The difficulties we are trying to explain are presented in Tables 2 and 3. Using the independent variables described in Table 1, we first tried to account for achievement differences among students when they entered Kindergarten. The results of this effort are reported in Table 2. Then, after the same children (with 14 percent attrition) completed second grade, we did the same analysis once again.

The questions we were asking are obvious: in Table 2, does Head Start make a difference? In Table 3, does either Head Start or Transition make a difference? The answer to both questions is “no”.

Beginning Kindergarten

Table 2 reports three regression analyses with three different outcome measures, the Peabody Picture Vocabulary Test, the Woodcock-Johnson 22 Letter-Word Identification Test, and the Woodcock-Johnson 25 Applied Problem Solving Test. As the test names suggest,
the first two are measures of verbal achievement, while the third is a gauge of basic math problem solving skills.

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TABLE 2 ABOUT HERE

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Which independent variables made a difference? The answer is, by now, all too familiar: socially ascribed traits, factors over which children, their families and their schools have no control. Parent's education had a statistically significant and positive regression coefficient in each of the three analyses. The same was true for family income. Race worked to the advantage of the white majority group two times out of three.

Head Start participation made no difference. In this data set, 58 percent of the beginning Kindergarten children had been in Head Start. But the statistically nonsignificant Head Start coefficients indicate that participants gain nothing by having participated.

These results are troubling for two reasons. First Head Start doesn't seem to work. Even with the Head Start variable incorporated into each regression analysis, socially ascribed traits --class and race-- work much as we would expect in the absence of intervention. In fact, in analyses not reported here, we simply deleted the Head Start variable from each analyses to see what would happen, and the answer was "nothing".

We initially took comfort in the statistically significant and positive findings for social skills. In contrast to socially ascribed traits, here was a variable with a consistently positive effect on achievement which we may be able to do something about. Maybe Head Start works through social skills, indirectly affecting achievement.
When we ran our analysis with social skills as the dependent variable, the regression coefficient corresponding to Head Start was, in fact, statistically significant, but it was also negative (Bickel, McDonough, & Maynard, 1996). Rather than make a great deal out of one coefficient, we concluded that, once again, Head Start was inconsequential.

At this point it seems reasonable to judge that we have given Head Start enough opportunities to show its efficacy in promoting measured achievement. It also seems reasonable to judge that efficacy is missing.

**Finishing Second Grade**

Perhaps we should terminate the statistical analysis at this point. After all, the purpose of Transition is to maintain Head Start gains. But there are no Head Start gains. However, perhaps Transition itself promotes measured achievement, even in the absence of Head Start effects.

Examination of the regression results reported in Table 3, however, indicate this is not the case. The variables used are the same as those incorporated in the Head Start analyses, except that Transition participation and pretest score are added as independent variables, and outcome measures are scores on tests administered at the end of second grade.

The results were no more encouraging than those reported for Head Start. Transition has a statistically significant regression coefficient in only one of our three analyses, and the coefficient is negative. Rather than risk over-simplifying one small, even if statistically
significant relationship, we conclude, much as with Head Start, that Transition has not effected measured achievement.

Predictably, there were strong positive relationships between pretest and outcome measures in each analysis. In view of this, it is also easy to anticipate that family income and parent’s education did not show the analysis-to-analysis consistency we saw at the beginning of Kindergarten. The emergence of gender effects in two of the three analyses is something we had not foreseen, but effects are quite modest. Pretest scores, in effect, overwhelm everything else. For our purposes, the most important findings were no Transition effects, and once again, no Head Start effects.

What's Going On?

According to the quantitative data, both Transition and Head Start itself, as time goes on, seem to produce costs rather than gains for participants, at least as far as measured by these standardized tests. What is going on here? The lack of achievement advantages for Transition children may be related to the fact that the project encouraged teaching practices that are inconsistent with the standardized tests used to evaluate it and further, that such teaching practices may in fact be detrimental to low income children for that very reason. Our argument in support of this line of reasoning draws upon the ethnographic research conducted throughout the program. The ethnographers were participant-observers in classrooms (grades K - 3 in the five project schools) and in staff development sessions for teachers. In addition, they conducted individual interviews with teachers and project staff involved in designing and implementing the staff development component. We turn first to the format and messages of Transition’s staff development component.
The Staff Development Component

Original Goals. One of four major goals of the West Virginia Transition project has been the provision of a "developmentally oriented program for children which focusses on children's strengths and most absorbing interests and does not adhere to a deficit curriculum." (grant proposal, 1991) The proposal goes on to list three strategies for implementing this developmentally oriented program which encourage teachers to: (1) be non-judgmental observers and recorders of children in order to develop personalized programs for them, (2) share their knowledge about children with teachers in other grades as well as with other individuals and agencies who provide services to families and (3) assess each child's progress using the best child development knowledge and "document that growth and learning through narrative/descriptive data and samples of children's work".

In practice, the Transition staff development program included a variety of elements for teachers. Many teachers attended local and out-of-town conferences relating to developmentally oriented practices. Resource rooms established in each school served as lending libraries of developmentally oriented materials for teachers and parents to use with children. Ethnographers provided teachers with detailed fieldnotes of classroom observations and teachers were encouraged to use the observational data as a basis for reflection on their teaching practices.

Most important to this discussion, though, are the series of local staff development meetings (four to seven per school year) which focused on reflective, child-centered teaching. These meetings served as the primary vehicle for communicating with teachers. Whereas only some teachers were offered or took advantage of opportunities to attend out-of-town
conferences, and any one teacher's participation in classroom observations likely lasted for only 2 semesters, all Transition teachers were invited to attend the frequent staff development meetings. Thus, we conclude that whatever messages teachers received from Transition were most likely received from these meetings, which were led by a visiting consultant with an extensive background in developmentally oriented early childhood education.

Meeting Format. The staff development consultant, Anna Bradley, typically began the meetings by sharing her plans for the session and asking for additional ideas from teachers. For example, in a session in the third year of the project,

Anna began by saying she wanted to talk today about developmentally oriented practice and what that means. She said she also is hoping to talk today about some brain research. She asked everyone if that was okay and nobody responded. She said she'd start out like that and then if they began to wiggle, she'd know it wasn't.

(Meeting fieldnotes)

Following this type of introduction, there was usually a period of unstructured discussion. Depending upon the way Anna framed her comments and questions, teachers' responses consisted of either silence or comments addressing either specific children and concerns in their classrooms or more general issues. Anna alternated between asking questions designed to encourage teachers to think about their practice and expressing her own ideas about how children grow and learn, often supporting them by briefly mentioning various scholars, educators, research studies and theories pertinent to the topic at hand. For example, at the meeting alluded to above, the following discussion took place.

Anna asked if the teachers were willing to share what developmentally oriented means
to them. She waited during a lengthy silence, and then [a teacher] said she sees it as
teaching a child when he’s ready to learn, and teaching him things he’ll pick up
easily. Anna nodded and talked about someone (author or researcher) who said that
learning proceeds from the known to the unknown and the job is to find the match.
[Another teacher] said to her [that] it’s important to expose all the children to things;
even if it doesn’t click, they’ve been exposed. She said some have to work harder or
take it in a different way. Anna talked about somebody saying it was like doing a
dance on a ladder that weaves above and below where the child is. [A third teacher]
said there’s a delicate [balance] between pushing a child and motivating him. Anna
said we’ve already said that learning starts with people’s strengths and interests. She
asked if anybody else had anything. There was about a five second silence and then
Anna said that developmental education has always encompassed the whole child, and
we’ve all heard about that and she doesn’t want to belabor it. She passed out a
handout and said that she’d give [the teachers] a list of what other people think is
important. She asked them to talk about anything on the list they disagree with.
There was some silence, and then Anna said the first one sounded almost Froebellian,
and [that] we all remember him from Ed Psych. Then she talked a bit about Socratic
questioning. Again she asked if anyone disagreed with anything on the list. This
time there was about a 20 second silence. Anna finally said maybe they were all
things they could all "buy". (Meeting fieldnotes)

Messages to Teachers: Based on observations of staff development meetings, interviews and
conversations with Anna Bradley, and interviews with teachers, we identified five
overlapping messages to teachers about teaching young children. The messages are philosophically consistent with a constructivist approach to learning and development.²

1. Each child constructs her or his own knowledge through actively interacting with people and things.

2. It is the role of teachers and parents to facilitate these constructions by providing non-threatening, stimulating environments with opportunities for active, meaningful exploration.

3. This facilitation should be informed by narrative, descriptive data obtained through observing and talking with children, not by textbooks and prescriptive curriculum guides.

4. The effectiveness of this facilitation should be evaluated by the teacher who is continuously reflecting on her own practice, not by standardized testing of children.

5. As the teacher engages in studying children, providing opportunities for their learning and reflecting on the entire process, she is constructing her own knowledge about teaching and learning.

Each Child Constructs Knowledge

The entire series of staff development messages rests on the notion that each individual creates or constructs his or her own knowledge. The idea is that children (or learners of any age) can and must do the learning themselves, by actively engaging with meaningful aspects of their environment. This cannot be done to or for them. Anna referred to the ideas of John Dewey: "There's nothing new about it. We go back to Dewey. In a sense, we're reclaiming the naturalness of children's learning."

Teachers were encouraged to make their teaching practices consistent with this view of learning, focusing on the facilitation of a stimulating, meaningful learning environment for children, rather than on the transmission of information.

[Anna] said what she is really trying to do is to get teachers to think about [the
difference between instruction, where you teach, dictate or lead the student, and
construction, where the child adds to his own knowledge. ... There is no such thing
as teaching, only providing opportunities for learning. (Meeting fieldnotes)

Similarly, teachers were advised: "Form the mind, don't furnish it". They were
counseled to help children be in control of themselves and their learning by effectively
setting the stage for students to take their own learning forward.

Teachers and Parents' Facilitate Learning

Anna saw teachers as facilitators of learning rather than as direct instructors. She
courage them to interact with children in a manner that would enable them to create their
own knowledge. For example, she recommended that teachers develop the art of questioning
in a way that "leads kids to create their own knowledge", commenting that, "Children know
how to think; we just have to ask good questions." Also, she cautioned against imposing on
children, recommending that children play a major role in classroom decision-making. She
suggested involving children in curricular and pedagogical issues by asking kids what they
want to know, engaging them in dialogue about "things that are meaningful to them", and
allowing them to set their own goals and standards, make up their own daily schedule, and
decide what goes in their own portfolios. Along the same lines, Anna argued that children
should be encouraged to become self disciplined by being responsible for their own behavior.
For example, she once suggested to a teacher who used time-out as a behavior management
technique that she allow children to decide when they were ready to return to the group.

Just as important as teachers, to Anna, was the environment teachers created in their
rooms. She exhorted teachers to "set the stage" for learning, and she said "your classroom can become your assistant teacher". She advocated an environment full of choices and opportunities for exploration and discovery—an environment that is not overstructured, and one that provides a great deal of freedom for students to be human and create knowledge.

Anna encouraged the use of learning centers to facilitate exploration and learning. She advised teachers to have learning goals for the centers, while at the same time suggesting that teachers "just put stuff out and see what happens". Anna recommended using materials where the form is not prescriptive—for example, wooden blocks, art materials like paints and clay, and kitchen utensils rather than worksheets and dittos.

You need to use sand. You need to use a lot of water. You need to use lots of science activities that they can discover. And cooking...Any way you want to do it, but they need free movement and a lot of appropriate activities for their age level and their development...I think any class that you do a lot of writing, you do a lot of sitting still and you do a lot of paperwork, and run off sheets, is not a developmental kindergarten. (Interview)

Know Your Children

According to Anna, the effective facilitation of learning ultimately rests on the teacher's knowledge of child development generally and, even more important, on her knowledge of the particular children in her classroom. By carefully studying, observing and talking with, her students, the teacher can gain the knowledge needed to create an environment—a curriculum—that is personalized for those particular children. Transition teachers were advised to use this approach rather than to "mindlessly conform" to
prescriptive curriculum guides.

Anna wanted teachers to observe and study the children in their classes and use what
they learn "to create curriculum that’s personalized for children", curriculum that focuses on
children’s "strengths, interests and passions". She advised teachers of the importance of
observing or studying children prior to interfering.

In the original grant proposal, Anna described a "child study" process where teachers
would be asked to volunteer to select a child who interested her to study in depth. Teachers
would study and describe the child in terms of a list of "multiple perspectives":

A. The child’s stance in the world: gesture, posture, inflection, rhythm, energy.
B. The child’s emotional tenor and disposition: tone, expressiveness, intensity,
   range, pattern.
C. The child’s mode of relationship to other children and to adults: attachments,
   variations and consistency, quality, range.
D. The child’s activities and interests: modes of engagement, pattern of
   involvement, range, intensity.
E. The child’s involvement in formal learning: modes of approach, interest, patterns
   or involvement.
F. The child’s greatest strengths and most absorbing interests.
G. The child’s areas of greatest vulnerability.

Anna emphasized the importance of describing, rather than judging, children in this
process, cautioning teachers not to try to "psych kids out", but to simply watch and listen to
them, attending to only what is directly observable.
Anna contrasted this emphasis on studying children and developing personalized curriculum for them with more content-oriented approaches to curriculum. She advocated focusing on the child rather than the content, saying that "content-driven approaches have failed in early childhood" and recommending that teachers "put content aside and focus on the child". She was particularly opposed to what she called "canned curriculum", suggesting instead that teachers "do what is right for each child".

Along the same lines, Anna preferred a focus on "life skills" rather than on academics in the early school years. She argued that teachers are pushed into teaching reading, writing and other subject matter when they should be teaching social skills such as how to get along with people. According to Anna, teachers are trying to teach advanced curriculum to kids too soon. "Learning to read is not hard. We make it difficult by trying to teach it too early and [we] confuse kids." This "push-down" curriculum results in school failure for young children.

A lot of children aren’t successful in school because they’re not ready for the material they’re expected to learn. …If the content is too far ahead of the kids, the kids will pull out due to fear of failure. (Meeting fieldnotes)

Anna asserted that ultimately, we need to ask ourselves: "What is important for young children to know? What is worth knowing?" According to Anna, the answer to those questions comes back to the life skills.

The biggest thing to me that’s worth knowing is how to get along with each other, how to respect yourself and respect others. … The second thing that’s important - and the criterion for me would be: "Is everything you teach related to what the kid is
doing outside of school and are you taking everything outside of school and enriching it and enhancing it in school?" (Interview)

In addition, we determine what is worthwhile for children to know by observing and listening to them. They will let us know what is important to them.

On the other hand, ...it's different for each child. ...Knowing what's worth knowing really means listening to the child and extending what he's interested in. We're back to strengths and absorbing interests. ...What's worth knowing is something that you really want to know. In your gut level, you want to know it. And that means, back again to knowing the child, to know what for him is worth knowing. (Interview)

**Reflect; Question Your Practice**

Anna called on teachers to reflect on their own teaching practice and its meaningfulness to children. Along these lines, she urged teachers to be critical consumers of educational knowledge, advising them not to believe all the research they read, not to "buy every pig in a poke", and to question "fads" such as time out, Attention Deficit Disorder (ADD) and portfolios. She extended this advice to her own ideas: "Nothing I say is absolute gospel."

Anna frequently championed the value of reflection in general, saying things like: "The unexamined life is not worth living". She used and advocated question-asking as a vehicle for reflection, encouraging teachers not to be threatened by questions because "the questions are as important as the answers"; and "it is the questions that open doors for options for change".

For Anna, the ultimate goal of reflecting is to study and "analyze your own teaching"
to see how it could be improved. She invited teachers to test ideas in their classrooms, to become researchers. In addition, she urged teachers to ask themselves three questions: "Why am I doing this? What is it teaching? What other ways are there to do it?" In this way, teachers would be able to "see how [their] teaching stands up to what [they] believe, ...to [their] philosophy of teaching." Acknowledging the difficulty of this kind of honest, self-evaluation, Anna called on teachers to have the "courage" to analyze their teaching.

Construct Your Own Knowledge About Teaching

Anna believed it was important to treat teachers the same way she asked them to treat their students - in other words, to allow and encourage them to construct their own knowledge. For example, she commented "If I don’t want [teachers] to be prescriptive with kids, I can’t be prescriptive with them". Similarly, she commented to a group of teachers at a staff development meeting, "The grant never intended to change teachers. You bring about change yourselves." In accordance with this, she strongly supported teacher autonomy, maintaining that teachers need to "set their own goals" and "find their own way", rather than being pressured to accept particular teaching ideas and strategies.

It was not uncommon to hear Anna assert that teachers’ knowledge and wisdom gave them the right to teach in whatever way they best saw fit. Contending that "teachers know best about curriculum", "know what’s right for their classroom", and "know more than they think they do", she argued for giving teachers "carte blanche, [and] they’ll do what’s best for their students". In Anna’s view, Transition teachers did not have this kind of autonomy. "You’re not autonomous. You’ve got to have freedom to teach where you want to, when you want to and how you want to." She attributed the lack of autonomy to a widespread and
unwarranted lack of trust in teachers in U.S. society. Anna urged teachers to stand up for themselves and their beliefs about teaching and learning. She encouraged them to "trust your feelings", to "be brave enough to call people on things you don't agree with", to "argue your point, say you don't agree", and to "talk back to administrators."

Teacher Responses to Staff Development Messages

Even if Transition teachers overwhelmingly embraced and practiced the constructivist ideas they heard in staff development meetings, it is debatable whether these practices would translate to increased standardized test scores, especially in the short-term. Before discussing this in greater detail we turn briefly to the issue of how teachers actually responded to the messages of Transition's staff development.

Classroom observations and teacher interviews suggest less than full endorsement and use of the developmental practices Anna stressed. Many teachers exhibited varying levels of resistance to the meetings themselves, some of which had to do with the involuntary nature of their participation in the project (Parrott, et al., 1993). Some felt criticized when Anna spoke out against teaching practices they employed. Also, many teachers objected to the fact that meetings consisted primarily of general discussions of philosophy rather than new ideas and "something useful" to take back and try in their classrooms.

However, virtually all Transition teachers valued the staff development meetings as opportunities to get together with their professional peers--other early childhood teachers--to "talk with other adults", to "vent", to use each other as a support system and, when possible, to get new teaching ideas from each other. Furthermore, some teachers responded favorably to the constructivist messages about learning and development. In some cases, teachers
primarily responded by reflecting on their practice in a new way; in other cases, they made
modifications in their teaching as well. It is these changes in thinking and practice which
deserve closer scrutiny because of their relevance to our concerns about the relationship
between staff development messages and test scores.

Changes in Thinking: Interviews with teachers suggest that Anna was successful in her
attempts to encourage teachers to reflect on their practice. Again and again, many teachers
talked about the way their thinking was influenced by Transition. One teacher found herself
asking herself "What would Anna do here?" She said she might not always do what Anna
might do, "but it makes me stop and think and question some of the practices I've been
doing."

Another teacher said it helps her to think about whether there are other ways to
accomplish her goals. "You might not agree with [Anna], but it makes you think. If it does
nothing more than make you think, that’s a good thing to do. To rethink what you’re doing,
maybe 'Is this the only way? Is there another way?'"

One teacher explained how she learned from others in the staff development meetings
by considering their ideas in light of her own students and her own philosophy.

I like hearing everybody’s philosophy, because I have my own thoughts, but nothing
is engraved in stone. You know, I mean, especially Anna. Because everything that
she says, even if I don’t agree with it 100% or if I’m sitting there thinking "That
sounds good but that would not work at my school with my particular class", I see the
logic in it. And like I said in the other meeting, it just...makes me question, "Why
am I doing this? What is the benefit for these kids?" (Interview)
Changes in structure: Sometimes the changes in their thinking resulted in changes in classroom practices. For example, teachers reported being less structured and more child-centered in their classrooms.

My teaching is more child-centered. ... Before, there were certain things that I thought they should know. And I think I treat each child a little bit differently instead of just putting them all in one mold and making sure they all know exactly the same thing.

When asked for an example of something she had previously thought her children needed to know, she responded:

When I was structured we would sit down every day and go over the alphabet or we’d sit down and write, and that part of the structure is gone. [Now] they’re just kind of writing on their own. It’s not like it has to be made exactly this way. It’s kind of their own development.

Asked what prompted that change, she responded:

From the meetings we’ve had with Anna. You know, I’ve just looked at my teaching and brought a [few] other teaching [ideas] into it. [Also], talking with other kindergarten teachers and [hearing about] things they’ve done. I’ve used some of their ideas. So I think that’s made me a better teacher. (Interview)

Along the same lines, some teachers began giving children more choices and greater freedom to explore. One teacher who described herself as less strict, and more flexible and "loosened up" as a result of Transition staff development, began to look at playtime as "more constructive". She described how she now likes to provide children with materials, such as a
set of dominoes, and just observe them play.

I like to just sit when they just play for the object of just playing. Take these [dominoes] and do whatever. I give no instructions. I say, "Here they are." I like to listen to the interaction between the kids... I like to listen to how they work out things, who tends to be the boss ... or who tends to sit back and not get involved. ...

[Now] I think that is something more than just ... goofing around. ... But I never would have done that before. I've gotten away from "This is the way it is and that's the way you're supposed to do it", and it comes from this [Transition staff development] I'm sure. (Interview)

Not all teachers were pleased with the results of allowing children greater freedom.

Instead of giving them specific things to play with, we've given them more choices. And I've let mine move around the room instead of staying at a certain table for so many minutes. I'm not as strict [as a result of] hearing Anna talk. And I'm not comfortable with that situation. I was more of a structured teacher. They had some free time, but I'm giving them more opportunity to interact with each other ... I think there's good about the way I taught before and I think there's good about letting them have more time where they can just socialize - [time] when the teacher's not telling them exactly what to do. (Interview)

Changes in Curriculum and Instruction: Teachers also examined their ideas about curriculum and instructional practices. For example, one teacher reflected about using pencil and paper tasks like workbooks in teaching young children. She found the staff development sessions helpful in keeping her "in constant check" about whether her teaching methods were
child-oriented.

I think Anna kind of called a lot of attention to it, you know, and you think you're in constant check...We'll mention something at the meeting and it will make you think, and you go back and [ask yourself] "Do I really do that in my classroom? Should I be doing that? I think it's probably kept me reflecting through the year. (Interview)

Another teacher became more comfortable with "not being in total control of the lesson" while the children are working together in small groups, and letting children move around more interacting with each other.

Another second grade teacher described how she had modified her expectations of young children.

I found out they're not supposed to be able to do that! Six and seven year old kids cannot look up [at the board] and see something and then transfer it to paper. It's difficult for them to do. So, I don’t try to make them do it anymore. (Interview)

One teacher responded to Anna’s request to critique a staff development meeting by saying that the discussion about time-out had particularly interested her. She touched off an exchange that illustrates the reflective thinking Anna encouraged:

[She] said she used time-out for 16 years and now was wondering why. She said that teachers fall into a trap where they’re in a room with a closed door and they use things that work. She said often teachers aren’t reading, but they’re experimenting to see what works for them, and she said time-out worked for her. Anna said the fact that it works is not an argument for time-out; there must be more rationale. [The teacher] said that she is thinking that her own time-out is not working. She said she
sends the same children every day, so she guessed it wasn't working for these children. Anna beamed and said "Isn't that what a good staff development program does for you? It makes you reflect about some of the things you are doing."

(Meeting fieldnotes)

**Summarizing Teachers' Responses**

Clearly, some teachers responded to Transition staff development experiences in ways that are consistent with original project goals. They observed children more, and made an effort to allow for greater freedom and choice for children in the classroom. Also, many engaged in serious reflection about their teaching practice as a result of participating in the meetings with Anna. However, teachers did not talk about the individual construction of knowledge or about themselves as facilitators of these constructions, language used above to describe the major staff development messages to teachers. Most likely teachers did not speak in these terms because the staff development messages were not presented to them in that manner. As noted earlier, the sequence of messages was our construction. When Anna spoke with teachers, she did not talk in terms of any particular list of messages or objectives. It was much more informal and, as Anna described it, a little bit "loosey-goosey".

Nevertheless, we believe the staff development program clearly promoted a developmental and constructivist approach to early childhood education. Whereas teachers' responses to staff development messages varied, quite a few had favorable reactions to the messages and modified their thinking, and in some cases their teaching practice, in relation to them.
Developmentalism Meets Standardized Testing

Those who tried to move their thinking and/or practice in a more developmental, constructivist direction faced a dilemma. They felt increasingly pressured to teach to the state-mandated standardized tests at the same time they were being urged by Anna to disregard the tests and do what they knew was best for children. Anna spoke again and again about an inherent contradiction between standardized testing and developmentally oriented/constructivist ideas about teaching and learning. Anna argued that standardized tests are "contradictory to what we know about developmentally oriented teaching and may be detrimental to children and their learning." She believed such tests resulted in the premature labeling of children as low achievers. In addition, she felt that teachers under the gun to raise test scores begin "teaching to the tests", a process that encourages children to look for right answers (the "right answer syndrome"), rather than to freely explore and construct meaningful knowledge.

Anna also contended that serious, philosophical reflection, in conjunction with the study of children, was superior to standardized testing as a means of evaluating one's teaching. She frequently and strenuously criticized the use of standardized tests with young children, maintaining that the tests are not valid indicators of what children know. Anna contended that teachers, especially those who make good observational records of children, can "tell us more about what each student knows than the tests can."

I don’t think [the test is] the least bit valid. ... A teacher could probably have told you within the second month of school exactly what that kid knows. ... Now are teacher’s judgements erroneous? Sure. But more erroneous than standardized measures? Absolutely not. You know, because they’re going to factor in everything
Because of her strong beliefs about the inconsistency of standardized testing and developmentally oriented practice in early childhood education, Anna was angered and embarrassed by Transition's nationally-mandated standardized testing (as discussed above) of children in grades K - 3. She also opposed the state-mandated testing of children using the CTBS (California Test of Basic Skills) and the West Virginia STEP test, and on a number of occasions, she urged teachers to resist standardized testing.

Anna told the teachers they have a choice. "..."You [either] 1) say I can't do anything about it and so I'm going to leave it the way it is, or 2) [you] fight." She said she sees the teachers as fighters. ... She said the teachers could tell right now what the kids are going to make on those tests so why are we wasting the time? She said the teachers "need to start fighting these things". (Meeting fieldnotes)

Teachers shared Anna's aversion to standardized testing and struggled with what they perceived as a conflict between some aspects of a developmental program and state and county requirements or policies. Several teachers reported that even though ideas from staff development fit with their own philosophy of teaching, they felt pulled to meet county or state requirements to teach certain things in certain ways and to assess with standardized tests. As one teacher explained, "It kind of pulls you apart because the county wants you to have this, this, and this, and Anna's saying "No, this, this and this - that's what you should be doing".

This conflict intensified during Transition's fourth year as children entered 3rd grade, when state-mandated standardized achievement testing intensified. One third grade
teacher asked, "If you're doing all these developmentally appropriate things for each child, what do you do when it's CTBS time?" Two schools, in particular, were under extreme pressure from their counties to increase test scores. In one case, teachers reported being "verbally attacked" for low scores and instructed to do "whatever it takes to get the scores up". As a result, teachers made significant modifications in their teaching, focusing on the content and format of the CTBS. As one teacher explained:

All we did the first half of the year was drill and skill. We drilled skills. We pounded it into them. ... Our goal was to bring up the CTBS scores and that's what we did. ... We were given [by a district supervisor] a list of vocabulary words that would be on the CTBS. ... Those became our spelling words. (Interview).

Teachers who most keenly experienced the tension between the contradictory pushes for a developmental, constructivist approach on the one hand, and the push for higher standardized test scores, on the other, felt caught in the middle. They often felt frustrated, overwhelmed and/or less and less in control of their teaching.

Summary and Conclusions

A developmental approach is not necessarily inconsistent with standardized testing. It is possible that children who are provided with stimulating, appealing environments, rich with opportunities for exploration and learning of all kinds, will be autonomous learners and eventually will make high scores on standardized tests. However, this is not a likely outcome of the way teachers experienced developmental, constructivist ideas in the context of Transition's staff development meetings.

Ideas were typically discussed in the absence of specific suggestions and guidance
about how to apply them in the classroom. Moreover, when teachers requested more specific information about classroom application, Anna typically responded by explaining that this project is "not about how-tos". As noted above, she believed it unwise for her to be prescriptive with teachers when she was asking them not to be prescriptive with their students.

In addition, ideas were often presented in a disjointed fashion, with many truisms or brief comments about a line of research or a theory thrown out in quick succession. It was rare for one idea or set of ideas to be pursued deeply and extensively, with teachers engaging actively in the process. As a result, teachers found it difficult to integrate the ideas and apply them in their classrooms. One teacher described it this way:

We've had ...bits and pieces of what we could use with our kids. But ... nothing seems to gel. It's a little bit here and a little bit there. ... I guess I'm going back to the idea that we need ... more structure as far as what will help us to have the foundation so that we can do more in the classroom itself. We just get so much ... and I don't know that ... [it all] sticks or that you can use it. ... And too much of it is lecture and it's not real world. (Interview)

Teachers who, despite the pressure of standardized tests and the lack of strategies for applying developmental and constructivist ideas in the classroom, modified their teaching as a consequence of the staff development, did so in ways that resulted in less structured, more relaxed, comfortable environments for children, but may not have provided a highly challenging environment intellectually. The teachers described changes that, in most cases, seemed to demand less, rather than more, from children academically. Lacking specific
guidance about how to facilitate particular kinds of learning in a way that at the same time promotes children's autonomy, some teachers tended to leave children free to do what they would with materials, games and so on. The result of this seemed to be greater freedom and autonomy for children, but less progress in terms of developing skills and understanding concepts. This may not be unique to Transition. For example, Stone (1996) argues that developmentalism, and its "most recent expressions...in developmentally appropriate practice and constructivism", discourages teachers and parents from "asserting themselves" or intervening with children.

Developmentalism gives rise to a disabling hesitancy and uncertainty about how or whether adults should attempt to influence children. It strongly suggests the possibility of harm, but it offers no clear guidance as to a safe and effective course of action.

We agree with Kostelnik (1993) that developmentally appropriate practice does not necessarily mean an unstructured program with minimal teacher guidance, nor does it necessarily mean low academic expectations for children. Kostelnik argues that the essence of developmental practice involves respecting each child as an individual and using all we know about "how children develop and learn" in planning "content and strategies" for them in early childhood programs. Calling the idea that "academics have no place in a developmentally appropriate program" a "myth", she asserts that developmentally oriented teachers should play an active role both in planning and in working directly with children in the classroom in an effort to accomplish particular learning goals. However, the nature of the planning and teaching is informed by teachers' knowledge of how children learn and
In Kostelnik's notion of a developmental perspective, children learn not "less", but learn "better" as a result of receiving a "solid foundation of academics within a context of meaningful activity".

This line of thinking is not new. Dewey (1938) emphasized the importance of parents and teachers taking account of the developmental needs of children, but also playing an active role in structuring a way of satisfying those needs.

Let me illustrate from the case of an infant. The needs of a baby for food, rest, and activity are certainly primary and decisive in one respect. Nourishment must be provided; provision must be made for comfortable sleep, and so on. But these facts do not mean that a parent shall feed the baby at any time when the baby is cross or irritable, that there shall not be a program or regular hours of feeding and sleeping, etc. The wise mother takes account of the needs of the infant but not in a way which dispenses with her own responsibility for regulating the objective conditions under which the needs are satisfied.

Dewey did not believe that such regulation was an infringement of the baby's freedom. Along the same lines, while acknowledging that "traditional education tended to ignore the importance of personal impulse and desire", Dewey was critical of teachers who hesitated to actively guide their students' learning.

...Guidance given by the teacher to the exercise of the pupils' intelligence is an aid to freedom, not a restriction upon it. Sometimes teachers seem to be afraid even to make suggestions to the members of a group as to what they should do. I have heard of cases in which children are surrounded with objects and materials and then left
entirely to themselves, the teacher being loath to suggest even what might be done with the materials lest freedom be infringed upon. Why then even supply the materials, since they are a source of some suggestion or other?

Whereas Dewey acknowledged the harm done by teachers who "abused their offices" by dictating to children, he criticized progressive educators for failing to recognize the importance of the teacher playing an active role, especially in terms of selecting and organizing subject matter. He did not advocate a single course of study for all progressive schools; however, he felt that progressive educators had neglected to attend to the importance of the "orderly development toward expansion and organization of subject matter".

Up to the present time, the weakest point in progressive schools is in the matter of selection and organization of intellectual subject matter... The basic material of study cannot be picked up in a cursory manner. Occasions which are not and cannot be foreseen are bound to arise wherever there is intellectual freedom. They should be utilized. But there is a decided difference between using them in the development of a continuing line of activity and trusting to them to provide the chief material of learning.

Of course Dewey strenuously objected to the way traditional educators "ladled" out "doses" of previously organized knowledge. However, as the excerpts above illustrate, his experiences with progressive schools and teachers led him to advise educators, even those committed to a progressive or developmental perspective, to keep in mind the intellectual and academic goals of schooling.
When education is based in theory and practice upon experience, it goes without saying that the organized subject-matter of the adult and the specialist cannot provide the starting point. Nevertheless, it represents the goal toward which education should continuously move.

Clearly Dewey, as well as more recent scholars like Kostelnik, advocated teaching that is informed not only by knowledge of children, but also by a knowledge of subject matter and how to organize and introduce it in ways that are meaningful to children in the present, but also will move them towards more extensive knowledge and understanding of the subject matter. The Transition teachers, however, were introduced to developmentally oriented teaching in a way that downplayed the importance of traditional subject matter, focusing instead on spontaneous learning (particularly learning about "life skills") which would emerge as children interacted freely with each other and with stimulating materials. While Anna believed that teachers and parents should facilitate children’s learning, what she stressed in this facilitation was creating a relatively unstructured environment with many opportunities for children to freely explore in order to create their own knowledge. This is consistent with Stone’s argument that, despite what Dewey and others might have said or written, in practice, developmentally oriented teachers may be inclined, even encouraged, to play a relatively inactive role, to do little more than arrange the learning environment in a way that is conducive to optimal development which should occur almost naturally.

From a developmentalist perspective, if opportunity and conditions conducive to developmental advancement have been maximized, the developmentally guided teacher or parent has done all that can safely be done.
Stone asserts that developmentalism encourages teachers and parents to lower their expectations of student achievement.

Given that developmentally appropriate teaching and parenting is intended to fit current developmental status and given that efforts to exhort or otherwise induce advancement beyond the child's developmentally governed potentialities are considered risky at best, teachers and parents are given to understand that expecting too little is a much better choice than expecting too much.

Whereas Transition staff development messages paralleled Kostelnik's concern with respecting each child as an individual, they did not stress the active role of the teacher in guiding children toward specific learning goals. By de-emphasizing "how-tos", or specific ideas about how to apply a developmentalist, constructivist approach in their classrooms, the program may have unintentionally encouraged teachers to lower their academic expectations.

What about the low income children the Transition Project is designed to benefit? Despite the sincere good intentions of project designers and staff, it seems to us that the children may be the losers in this situation. Current social circumstances in the U.S. are characterized by an unprecedented emphasis on standardized testing as a means of determining one's needs and abilities, even in the early elementary school years (Kamii, 1994). In this context, it may be harmful to advocate for developmental, constructivist education for low income children who may have limited means of gaining access to the dominant cultural knowledge that comprises standardized tests.

We agree with Apple (1982) and Cornbleth (1990) that knowledge is not value-free, nor is it distributed equally. Higher SES individuals receive more high status knowledge.
than those from lower SES. Along the same lines, Delpit (1988) opposes the deemphasis of basic skills in the orientation of "white liberals who advocate a child-centered approach" to teaching literacy. According to Delpit, members of minority cultures want their children to learn the "discourse patterns, interactional styles, and spoken and written language codes of the dominant culture so they can succeed." Without this knowledge, the children will be forever handicapped despite the good intentions of "white liberals attempting to be nice to minority students".

Kozol (1972) articulated a similar position in his critique of free schools that downplayed the importance of math, English and other traditional subject matter in the schooling of poor, urban young people. He contrasted privileged youth, with financial and social supports as protection, who could afford not to comply with alienating expectations of schools and society, with poor children who did not have this luxury. In order to survive, poor children had to adapt, to a certain degree, to the "present conditions of the system". Then, as now, standardized achievement testing was an important aspect of those alienating expectations and conditions.

To show a poor...kid...how to make end runs around the white man's college-entrance scores - while never believing that those scores are more than evil digits written on the sky - to do this, in my scale of values, is the starting point of an authentic revolution.

On the other hand, is it fair to subject low income children to the "drill and skill" rote learning of basic skills associated with teaching to standardized tests? This is the kind of instruction low income children have received in low tracked groups and classes in traditional
programs -- a form of what Freire (1973) calls banking education, where teachers make deposits of information into their passively receptive student-banks. We agree with him that low income children may be losers in this scenario as well.

We are not claiming in this discussion to have explained the low achievement test scores that provoked and concerned us. We continue to believe that a variety of factors, programmatic and otherwise, may have contributed to these outcomes. Rather, we have drawn upon our ethnographic data to explore the dissonance between the unparalleled expansion of standardized testing and the growing movement in early childhood education towards a developmental, constructivist approach to teaching and learning for all children. We believe this issue merits serious consideration by Head Start and other programs which attempt to increase life opportunities of low-income children.
References


Endnotes

1. The staff development consultant's name has been changed to protect her privacy.

2. The series of messages is our own construction. Anna did not develop this list of messages nor were they ever presented in this fashion to teachers. We developed the list as a result of combing through pages and pages of fieldnotes and transcripts. We showed our first draft of the messages to Anna, and modified it in response to her suggestions.

3. Whereas the messages to teachers are highlighted here, Anna maintained that parents were critical to this facilitation process.
TABLE 1

Pre-School/In-School Experience

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td>HEADSTART</td>
<td>Head Start Participation, Scored 1 if Yes, 0 Otherwise.</td>
</tr>
<tr>
<td>PRESCHOOL</td>
<td>Other Pre-School Participation, Scored 1 if Yes, 0 Otherwise.</td>
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<td>TRANSITION</td>
<td>Transition Participation, Scored 1 if Yes, 0 Otherwise.</td>
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Student Characteristics

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<tr>
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<tbody>
<tr>
<td>PRETEST</td>
<td>Achievement Test Score at Beginning of Kindergarten</td>
</tr>
<tr>
<td>GENDER</td>
<td>Child's Gender, Scored 1 if Male, 0 Otherwise.</td>
</tr>
<tr>
<td>ETHNIC</td>
<td>Child's Ethnicity, Scored 1 if White, 0 Otherwise.</td>
</tr>
<tr>
<td>CHILD HEALTH</td>
<td>Adult Respondent's Assessment of Child's Health, in Five Levels.</td>
</tr>
<tr>
<td>SOCIAL SKILLS</td>
<td>Social Skills Scale Score, Thirty-Eight Likert Items with Three Responses to Each. (Cronbach's Alpha=.86)</td>
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Family and Household Characteristics

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<td>Family Income, in Twelve Levels.</td>
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<tr>
<td>PARENT'S EDUCATION</td>
<td>Parent Respondent's Education Level, in Ten Levels.</td>
</tr>
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<td>BOTH PARENTS</td>
<td>Parents Living in the Home, Coded 1 if both, 0 Otherwise.</td>
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<tr>
<td>PARENTING SKILLS</td>
<td>Parenting Effectiveness Scale Score for Primary Care Giver, Twenty-Six Likert Items with Six Responses to Each. (Cronbach's Alpha=.74)</td>
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<tr>
<td>PARENT'S HEALTH</td>
<td>Adult Respondent's Assessment of His/Her Health, in Five Levels.</td>
</tr>
<tr>
<td>UNDER 18</td>
<td>Number of Children Under Age 18 Living at Home.</td>
</tr>
<tr>
<td>OVER 18</td>
<td>Number of Adults Over Age 18 Living at Home.</td>
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Contextual Factors

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<td>School District/County, Scored 1 if Urban, 0 if Rural.</td>
</tr>
<tr>
<td>COHORT</td>
<td>Scored 1 for Kindergarten in 1992, 0 for Kindergarten in 1993.</td>
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</table>

1 Only 27 students in the sample are Black.
### TABLE 2

#### Regression Results
**Cohorts 1 and 2**

**Unstandardized and (Standardized) Coefficients**

<table>
<thead>
<tr>
<th>Headstart</th>
<th>Peabody</th>
<th>Wood22</th>
<th>Wood25</th>
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</thead>
<tbody>
<tr>
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<td>(.04)</td>
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<td>(-.02)</td>
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<td></td>
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<td>(-.01)</td>
<td>(-.02)</td>
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<tr>
<td>SOCIAL SKILLS</td>
<td>8.58**</td>
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<td>UNDER 18</td>
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<tr>
<td>OVER 18</td>
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<td>(.11)</td>
<td>(.06)</td>
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**Adjusted R-Squared**

- Peabody: 19.5%
- Wood22: 16.2%
- Wood25: 14.3%

N=290 N=290 N=290

*P<.05
**P<.01
***P<.001
### TABLE 3
Regression Results
Cohorts 1 and 2
Unstandardized and (Standardized) Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Peabody</th>
<th>Wood22</th>
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<td>-.37</td>
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<td><strong>Gender</strong></td>
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<td>(.01)</td>
<td>(.13)</td>
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<td>(-.01)</td>
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<td><strong>Child Health</strong></td>
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<td>-0.17</td>
<td>0.07</td>
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<tr>
<td></td>
<td>(.01)</td>
<td>(.02)</td>
<td>(.02)</td>
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<tr>
<td><strong>Social Skills</strong></td>
<td>-.05</td>
<td>-.36</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>(-.01)</td>
<td>(-.01)</td>
<td>(.07)</td>
</tr>
<tr>
<td><strong>Family Income</strong></td>
<td>0.59*</td>
<td>-.01</td>
<td>0.27**</td>
</tr>
<tr>
<td></td>
<td>(.12)</td>
<td>(.00)</td>
<td>(.18)</td>
</tr>
<tr>
<td><strong>Parent's Education</strong></td>
<td>0.81*</td>
<td>0.64</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>(.11)</td>
<td>(.10)</td>
<td>(.05)</td>
</tr>
<tr>
<td><strong>Both Parents</strong></td>
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<td>1.96</td>
<td>-0.77</td>
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<tr>
<td></td>
<td>(.06)</td>
<td>(.10)</td>
<td>(-.09)</td>
</tr>
<tr>
<td><strong>Parenting Skills</strong></td>
<td>0.49</td>
<td>0.68</td>
<td>-0.45</td>
</tr>
<tr>
<td></td>
<td>(.02)</td>
<td>(.04)</td>
<td>(-.06)</td>
</tr>
<tr>
<td><strong>Parent's Health</strong></td>
<td>-0.60</td>
<td>0.02</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(.05)</td>
<td>(.00)</td>
<td>(.06)</td>
</tr>
<tr>
<td><strong>Under 18</strong></td>
<td>-0.46</td>
<td>-0.07</td>
<td>0.19</td>
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<tr>
<td></td>
<td>(-.05)</td>
<td>(-.01)</td>
<td>(.06)</td>
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<td><strong>Over 18</strong></td>
<td>1.36</td>
<td>-0.68</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(.09)</td>
<td>(-.05)</td>
<td>(.04)</td>
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<tr>
<td><strong>District</strong></td>
<td>0.95</td>
<td>1.69</td>
<td>0.35</td>
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<td>(.04)</td>
<td>(.09)</td>
<td>(.05)</td>
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<tr>
<td><strong>Cohort</strong></td>
<td>0.13</td>
<td>-1.37</td>
<td>0.45</td>
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<tr>
<td></td>
<td>(.01)</td>
<td>(-.07)</td>
<td>(.06)</td>
</tr>
<tr>
<td><strong>Adjusted R-Squared</strong></td>
<td>51.8%</td>
<td>25.2%</td>
<td>43.9%</td>
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*N=243  
**P<.01  
***P<.001
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