Research suggests that children benefit from preschool programs only when the programs are of high quality. This study sought to ascertain if Texas public prekindergarten teachers and administrators recognized standards for high quality preschool consistent with nationally recognized standards, and to determine if their level of acceptance was significantly higher than the quality level in program implementation. Participating were 244 prekindergarten teachers from 18 public school districts, reflecting geographical and demographic diversity in Texas and including those with various student populations. A second group of study subjects included 66 administrators of schools with prekindergarten programs in the selected districts. Participants were mailed questionnaires assessing beliefs related to four areas of quality in preschool programs and their practice in the classroom: high quality curricula; family and community involvement; teacher-child interactions; and inservice and staff development. Return rates for teachers and administrators were 39 and 67 percent, respectively. Findings indicated that both groups demonstrated a high level of acceptance of preschool quality standards. However, belief scores were significantly higher than implementation scores for both groups and for all areas. Further, compared to administrators, teachers evidenced greater acceptance of high quality preschool curricula standards and of the importance of family and community involvement, and showed greater belief that high quality standards were being implemented in the curricula and in the implementation of inservice and staff development. Also, the prekindergarten programs did not align with many of the standards of quality noted by the National Association for the Education of Young Children.

(Contains 16 references.) (KB)
Dimensions of Quality:
Beliefs and Practices of Texas Prekindergarten Teachers

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Houston, Texas
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Dimensions of Quality: Beliefs and Practices of Texas Prekindergarten Teachers

Today as perhaps never before, the American public is becoming aware of the importance of the care and education of young children. Several factors have contributed to this heightened public awareness. Dramatic findings in the area of brain research are in the forefront of media attention today. Articles have appeared recently in *Time* (Nash, 1997), *Working Mother* (Jabs, 1996) and *Newsweek* (Begley, 1996). A special edition of *Newsweek* focusing on learning in the early years was published in conjunction with showing the ABC-TV special "I Am Your Child" on April 28, 1997.

Attention to the state of early care and education has also occurred at a national level. In particular, First Lady Hillary Rodham Clinton has shown great attention in this area. President and Mrs. Clinton sponsored a first-ever White House Conference on "Early Childhood Development and Learning" in April, 1997. Mrs. Clinton (1996) has also authored a book, *It Takes a Village*, on the topic of raising young children.

One of the key aspects to public awareness has been the issue of high quality in child care and early education. This issue centers not so much on the need for high quality, but how it happens, how program effectiveness can be assessed, and what it will cost. This author's research studies the existence of quality indicators in prekindergarten programs in Texas, as evaluated by teachers and administrators. Their perceptions of quality are compared to national-recognized and solidly researched dimensions of quality in early childhood programs. This study also examines the differences in philosophical beliefs about quality standards and actual implementation of high quality in prekindergarten classrooms.
The purpose of this study was two-fold: (a) to ascertain if Texas public prekindergarten teachers and program administrators recognized standards for high quality preschool consistent with nationally-recognized standards, and, (b) to determine if the level of acceptance of high quality preschool standards among teachers and program administrators was significantly higher than the quality level in program implementation. Suggestions for changes in the Texas public prekindergarten programs which would bring these programs into closer alignment with nationally-recognized quality standards were discussed in the study.

Methodology

This study was a nonexperimental research design utilizing survey methodology to examine relationships between beliefs about high quality pre-k programs and levels of quality occurring in actual pre-k classrooms in Texas. Subjects included pre-k teachers and administrators of pre-k programs.

The study was conducted in the state of Texas, in eighteen public school districts employing pre-k teachers certified by the Texas Education Agency. The districts chosen included those with small student populations (less than 2,000 students), medium student populations (2,000-25,000 students), and large student populations (25,000 or more students). These districts were located throughout the state and reflected both geographical and demographic diversity in Texas.

In order to obtain a wide sampling of Texas public school pre-k teachers, the following selection process was used by the researcher. A map of Texas was divided into six geographical sections. Then the largest cities in each geographical area were pooled and the name of one large city in each geographical area was randomly selected. Following the selection of the large cities, an atlas was used to determine the counties in which the selected cities
Dimensions of Quality in Pre-K

are located. Using the 1996-97 Texas Schools Directory, all school districts in those counties were listed, accompanied by their student populations. The districts were then divided according to student population into small districts (less than 2,000 students), medium districts (2,000-25,000 students), and large districts (25,000 or more students). Using a random drawing process, one district from each of these categories was then selected from each of the counties.

Subjects included a sample of 244 pre-k teachers employed by the school districts chosen for the study. Each teacher received a Teacher Survey with a cover letter. Stamped, pre-addressed envelopes were included to enable the teacher to return the survey directly to the researcher.

The second group of study subjects included 66 campus and central office administrators of schools with prekindergarten programs in the selected districts. These subjects received Administrator Surveys, cover letters, and pre-addressed, stamped envelopes.

Characteristics of high quality preschool programs consistently occurring in early childhood literature and research were extensively reviewed by the researcher. Items in the surveys were based on well-researched constructs occurring in early childhood literature on high quality preschool programs. The survey forms used in this study were modeled on Marcon's Pre-k Survey of Beliefs and Practices (Marcon, 1988) in that they measured beliefs about high quality preschool programs.

Survey responses were recorded on a Likert scale. A response of 1 indicated "strongly disagree," 2 was "disagree," 3 was "neither agree nor disagree," 4 indicated "agree," and 5 was "strongly agree." The survey items were developed in pairs. One item in each pair addressed the philosophy or belief of the pre-k teacher or administrator, while the second item of each pair
questioned whether the respondent viewed that belief as being practiced in the pre-k classroom. A total of 25 paired items were used on both the Teacher Survey and the Administrator Survey.

Results and Analysis

The return rates of surveys from pre-k teachers, administrators, and parents are indicated in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Subject Category</th>
<th>Surveys Distributed</th>
<th>Surveys Returned</th>
<th>Return Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prekindergarten Teachers</td>
<td>244</td>
<td>96 (39%)</td>
<td></td>
</tr>
<tr>
<td>Administrators</td>
<td>66</td>
<td>44 (67%)</td>
<td></td>
</tr>
</tbody>
</table>

Item responses on Teacher and Administrator surveys were combined into factor categories based on theoretical concepts. These were labeled Belief 1 through Belief 4 and Practice 1 through Practice 4. Belief 1 measured acceptance of high quality preschool curricula. Practice 1 measured occurrence of high quality curricula in the subjects' classrooms. Belief 2 and Practice 2 measured family and community involvement. Belief 3 and Practice 3 measured teacher-child interactions and Belief 4 and Practice 4 measured inservice and staff development.

A Rank Transformation approach was utilized in analysis of the data. The Wilcoxon-Mann-Whitney analysis was used to assign scores on the Beliefs portion of the surveys to teachers and administrators. Teachers and administrators were divided into categories of "high belief" (mean scores of ≥4.0) and "low belief" (mean scores < 4.0). Inclusion in the "low belief" category indicated lack of acceptance of recognized quality standards in preschool programs, while inclusion in the "high belief" groups indicated acceptance of quality standards. Table 2 indicates results of Teacher Group 4.
Dimensions of Quality in Pre-K and Administrator Group belief scores.

Table 2

Teacher and Administrator Groups Beliefs Scores

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>High Belief</th>
<th>Low Belief</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Teachers</td>
<td>96</td>
<td>88 91.7</td>
<td>8 8.3</td>
</tr>
<tr>
<td>Administrators</td>
<td>44</td>
<td>41 93.2</td>
<td>3 6.8</td>
</tr>
</tbody>
</table>

In both groups (teacher and administrator), subjects demonstrated a significantly high level of acceptance of quality standards in preschool programs, indicating that they were aware of high quality standards in preschool programs.

To examine the relationship of the two groups' acceptance of quality standards ("beliefs") as compared to actual classroom implementation of the standards ("practices"), a Wilcoxon Signed Ranks analysis was done. This test paired mean scores of "beliefs" (acceptance of standards) with mean scores of "practices" (implementation of standards) for both teacher and administrator groups. Results of these tests are reflected in Tables 3 and 4. As can be seen in these tables, there are significant differences between the scores of "belief" and "practice," with belief scores (acceptance of standards) higher than practice scores (implementation of the standards).

A rank MANOVA was then run on the teacher and administrator groups to determine between-subjects effects of teachers and pre-k program administrators. As evidenced in Table 5, Teacher Group scores are significantly higher than Administrator Group scores on Belief 1 (acceptance of high quality preschool curricula standards), Belief 2 (importance of family and community involvement), Practice 1 (classroom implementation of high quality preschool curricula), and Practice 4 (implementation of inservice and staff development...
Dimensions of Quality in Pre-K specific to early childhood education).

Table 3  
**Pre-k Teacher Group: Paired “Beliefs” and “Practices”**

<table>
<thead>
<tr>
<th>Belief 1</th>
<th>M</th>
<th>SD</th>
<th>Z</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice 1</td>
<td>4.6385</td>
<td>.4025</td>
<td>-7.552</td>
<td>.001</td>
</tr>
<tr>
<td>Belief 2</td>
<td>4.4375</td>
<td>.4368</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice 2</td>
<td>3.6458</td>
<td>.6742</td>
<td>-7.734</td>
<td>.001</td>
</tr>
<tr>
<td>Belief 3</td>
<td>4.5830</td>
<td>.3453</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice 3</td>
<td>3.4298</td>
<td>.4790</td>
<td>-8.395</td>
<td>.001</td>
</tr>
<tr>
<td>Belief 4</td>
<td>4.2309</td>
<td>.6081</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice 4</td>
<td>3.3646</td>
<td>.8503</td>
<td>-7.645</td>
<td>.001</td>
</tr>
</tbody>
</table>

<.001

Table 4  
**Pre-k Administrator Group: Paired “Beliefs” and “Practices”**

<table>
<thead>
<tr>
<th>Belief 1</th>
<th>M</th>
<th>SD</th>
<th>Z</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice 1</td>
<td>4.5432</td>
<td>.3406</td>
<td>-5.556</td>
<td>.001</td>
</tr>
<tr>
<td>Belief 2</td>
<td>4.5852</td>
<td>.4605</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice 2</td>
<td>3.7784</td>
<td>.6293</td>
<td>-5.244</td>
<td>.001</td>
</tr>
<tr>
<td>Belief 3</td>
<td>4.4830</td>
<td>.3666</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice 3</td>
<td>3.4508</td>
<td>.4257</td>
<td>-5.716</td>
<td>.001</td>
</tr>
<tr>
<td>Belief 4</td>
<td>4.5455</td>
<td>.4240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice 4</td>
<td>2.9356</td>
<td>.9187</td>
<td>-5.443</td>
<td>.001</td>
</tr>
</tbody>
</table>

<.001
Table 5

Difference in Beliefs and Practices of Teacher and Administrator Groups

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELIEF 1</td>
<td>3.951</td>
<td>.049*</td>
</tr>
<tr>
<td>BELIEF 2</td>
<td>4.284</td>
<td>.040*</td>
</tr>
<tr>
<td>BELIEF 3</td>
<td>2.227</td>
<td>.138</td>
</tr>
<tr>
<td>BELIEF 4</td>
<td>.087</td>
<td>.768</td>
</tr>
<tr>
<td>PRACTICE 1</td>
<td>6.733</td>
<td>.010*</td>
</tr>
<tr>
<td>PRACTICE 2</td>
<td>1.151</td>
<td>.285</td>
</tr>
<tr>
<td>PRACTICE 3</td>
<td>.214</td>
<td>.644</td>
</tr>
<tr>
<td>PRACTICE 4</td>
<td>7.463</td>
<td>.007**</td>
</tr>
</tbody>
</table>

Note. Real mean scores for teacher and administrator groups are reported in Tables 3 and 4.

* p<.05   **p<.01

Discussion and Implications

There exist nationally-recognized, well-researched indicators of high quality in preschool programs. These indicators are noted in the NAEYC publication Developmentally Appropriate Practice in Early Childhood Programs (1996). Such factors as child/adult ratios, staff development, family involvement, appropriate assessment styles, and styles of teacher/child interactions are shown to be strong determinants of program quality. Texas prekindergarten programs, however, do not appear to align with many of these standards of quality. As evidenced in this study, while pre-k teachers and program administrators have a high level of awareness of quality standards,
they are less able to implement these standards in program practices. Public prekindergarten programs across the state may vary greatly in quality at both district or campus levels. The following compares well-researched high quality standards with current standards in Texas prekindergarten programs.

Dr. Schweinhart, Dr. Weikart, and other High/Scope staff offer recommendations about the components of high quality preschool programs (1985). One important component of their model of quality preschool is a developmentally based curriculum, grounded in theory, research, and practice. The philosophical framework should allow for great diversity in the actual curriculum, and should provide the basis for teachers to make consistent decisions about a program’s day-to-day operations and long-range objectives. This underlying philosophy sets the mood and tone of the educational environment, allowing children to internalize values about their own importance in the world and about the skills they will need to acquire to participate in it fully.

Curriculum in Texas public schools is defined by a set of standards known as Essential Elements. Prekindergarten Essential Elements are divided into areas, or Domains, including: Cognitive Development, Social/Emotional Development, Aesthetic Development, and Physical/Motor Development. The Essential Elements list specific skills which children should master, but do not define a basic educational philosophy, detail how to assess mastery of these objectives, nor suggest how to teach subject matter. Essential Elements are currently in the process of being rewritten for the 1998-99 school year, and will be called Texas Essential Knowledge and Skills (TEKS).

In high quality early childhood programs, appropriate ongoing staff development must be offered to and engaged in by teachers (Schweinhart & Weikart, 1993). However, ongoing early childhood staff development is not
required of prekindergarten teachers by the Texas Education Agency (TEA). As reflected in this study, staff development specific to early childhood may vary widely from district to district, or may not exist at all in some districts.

The High/Scope preschool model was originally the Perry Preschool Project, whose program graduates have been studied longitudinally for over 25 years now (Schweinhart & Weikart, 1993). Study results have shown that the program graduates have been substantially more successful in life endeavors, as measured by such indicators as better social adjustment, higher incomes, fewer arrests and less drug use than their counterparts who did not attend the Project Preschool. An excellent comparison of preschool models can be found in the publication Models of Early Childhood Education (Epstein, Schweinhart, & McAdoo, 1996). In this comparison, the High/Scope mode exceeds other models in the quality standards compared.

The Texas Education Agency (TEA) should consider state adoption of the High/Scope preschool model. Staff development and inservice in High/Scope should be offered by all regional service centers. Monies should be earmarked at state level to fund this staff development, in order to ensure that inservice is available for all prekindergarten teachers. Prekindergarten teachers should be required by TEA to attend a specific amount of time participating in this staff development, to allow better implementation of quality programs.

Assessment of children in quality programs must be on-going, performance-based, and multi-dimensional (Teale, 1988; Engel, 1990). Assessment of children in quality programs must also be in an authentic environment with an evaluator who is familiar with the children. Further, assessment information should be consistently shared with families of children on an ongoing basis (Bredekamp & Rosegrant, 1992).

There exists no standard prekindergarten program assessment in Texas,
nor is any kind of individual prekindergarten student assessment required by the Texas Education Agency. (Perhaps this latter is in response to the reluctance of school districts to use any kind of “testing” with three- and four-year-old children.) In small (less than 2,000 students) and medium-sized districts (2,000-25,000 students) there is sometimes only one pre-k classroom per campus or in some cases only one per district. This tends to isolate pre-k and limits opportunities for teachers to share experiences, ideas, staff development and curricula.

A multi-dimensional, performance-based assessment method should be utilized in assessing individual prekindergarten student progress. It should be noted that High/Scope already includes this assessment procedure, using anecdotal note taking, “Key Experiences” (learning objectives), and a system of reporting assessment results to families of students. Computer software is also available for record keeping of this system. From individual student assessments should then be developed a method of evaluating pre-k program efficacy, standard throughout the state. The program evaluation process should include input from parents of pre-k students and prekindergarten teachers.

In high quality preschool programs, an efficient, workable method of family involvement must exist, in which all families’ cultures and contributions are welcomed (Schweinhart & Weikart, 1993). In the Texas prekindergarten programs, family involvement, where it exists at all, varies widely from district to district. Nothing in the area of family involvement is required for prekindergarten programs by the Texas Education Agency.

Suggestions for family involvement specific to early childhood classrooms should be available from either TEA or from regional educational service centers. Again, it is worth noting that the High/Scope model already includes training in family involvement.
Dimensions of Quality in Pre-K

Sufficient funding must be available to provide the equipment, materials, and supplies necessary for a high quality program (Bronson, 1995). Yet in Texas, specific funding for prekindergarten programs is not mandated by the state. Average Daily Attendance (ADA) simply pays a specific amount of dollars to the general financial fund in each district based on a formula of the enrollment and attendance rates of children in each district. This money may be divided among campuses and grade levels at the discretion of each district, according to the wishes of school boards, central office administrators, and campus administrators. Thus, program funding may vary drastically from district to district, depending on the level of importance accorded to early childhood education by various districts and campuses. As well, many administrators of pre-k programs are unaware that early childhood programs require more varied and often more expensive classroom materials than classrooms of older children.

A separate funding mandate enacted by the state is needed which will ensure that a certain portion of each district's money is used to specifically to equip and supply prekindergarten classrooms.

Changes in state regulations in college preparation of preschool teachers must occur to ensure opportunities for high quality programs in every district throughout Texas. Modifications to the state teacher licensing process should demand a license specializing in early childhood education (preschool through grade 3) for teaching in those grade areas. This license could then offer concentration on instruction in early education and child development birth through eight years during the teacher education process. The current university practice to prepare students for pre-k and kindergarten teaching consists of adding early education courses to a regular elementary education degree plan.
Dimensions of Quality in Pre-K

The Texas Education Agency must demand regular, ongoing staff development and inservice for pre-k teachers, specific to child development or to early education. Ideally, regional Educational Service Centers could provide this training. In some regions in the state, the service centers do offer early education staff development, but these are attended by teachers on a voluntary basis only, and are not available in all service centers. Some service centers currently offer High/Scope inservice already.

As well, TEA should include basic inservice in early education for the mid-level management certification which is necessary to become a campus principal in Texas. Both campus and central administrators must understand that pre-k and kindergarten students have needs different from older children. Administrators must also understand that high quality preschool programs do not look like elementary classrooms, and that early childhood classrooms need different materials and equipment than classrooms of older children.

Summary

Research findings indicate that young children benefit from early childhood programs only when the programs are of high quality (Epstein et al., 1985; Schweinhart, 1988). Results of this study indicate that well-established, solidly-researched standards of quality in preschool programs are recognized and accepted by Texas prekindergarten teachers and program administrators. Survey forms returned by study subjects indicated 91.7% of pre-k teachers surveyed held beliefs about quality standards in preschool consistent with nationally-recognized standards. 93.2% of pre-k program administrators also accepted these quality standards. However, teachers and administrators reported that actual implementation of quality standards in prekindergarten classrooms was not so likely to occur. Differences in teachers' and administrators' beliefs about quality standards and the actual implementation
of these standards in the classrooms were shown in this study to be statistically significant.

Recognition of and acceptance by educators of high standards in preschool programs is a first step toward increasing the quality of public prekindergarten programs in Texas. Acknowledgement of differences in levels of belief about quality standards and actual program implementation is a second step in improvement. However, sweeping changes in Texas prekindergarten programs are needed in order to bring existing programs into alignment with well-researched quality standards.
References


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Author(s): Katherine Taddie Kelly

Publication Date: Jan., 1998

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