Based on data from all 50 states, this feasibility study recommends that kindergarten attendance be mandated for children in Indiana starting in 1993. It further recommends that: (1) school corporations be funded for full-day kindergarten on the same basis as her grade levels, with a full day of reimbursement for full-day kindergarten children and a half day of reimbursement for half-day students; (2) corporations that offer full-day kindergarten must offer parents the option of half- or full-day kindergarten; and (3) local property taxes be increased in proportion to the additional state-funded request for full-day students. Information supporting these recommendations is presented in sections that provide: (1) an overview of and rationale for kindergarten programs, including a list of characteristics of high quality kindergarten programs; (2) reasons for offering full-day kindergarten; (3) estimates of district readiness to provide half-day kindergarten on a mandatory basis; (4) estimates of the cost of mandating full-day kindergarten; (5) fiscal impact of and superintendents' views on voluntary full-day kindergarten for which parents pay on a sliding scale; and (6) superintendents' views on, and other states' experiences with, voluntary full-day kindergarten for which parents are not assessed a fee. (RH)
FEASIBILITY STUDY
CONCERNING MANDATORY HALF-DAY KINDERGARTEN AND MANDATORY AND VOLUNTARY FULL-DAY KINDERGARTEN

Prepared for the Indiana Department of Education

by

Jack W. Humphrey

August 8, 1990
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Overview

Children who now are enrolled in kindergarten will graduate from high school in the twenty-first century. They will need to have attained essential skills necessary for success in a world considerably more complex than that encountered by previous generations. Faced with the need to upgrade educational opportunities for today's youth, most of the states have or are presently reviewing their policies regarding early childhood education.

Even though the first kindergarten in the United States was started over 130 years ago, by 1974, less than half of the states provided kindergarten to 90 percent or more of the eligible population (Robinson, 1988). Today, due to a significant development in kindergarten programs in the 1970s, especially in the South where previously only private kindergartens had been available, almost all American children can now attend public school kindergarten.

The traditional purpose of kindergarten was the transition from home to school. The objectives emphasized socialization, aesthetics, sensory-motor development, positive attitudes toward school, health and security, individual personality development through group experiences, general readiness, and concrete learning based upon the child's experiences (Evans, 1975; Weber, 1973). Since the late 1970s, there has been an increased emphasis on school readiness and the acquisition of specific academic skills. This change in emphasis is due, in part, to the forces of television and preschool programs which call for a more intellectually challenging curriculum (Olsen and Zigler, 1989). This includes the value of teaching phonics in kindergarten, including letter recognition and association of those letters with their most frequent sounds, has been supported by a large number of studies (Adams, 1990).

Children who attend kindergarten significantly outperform children who do not attend kindergarten. Various studies indicate that kindergarten children do better than nonkindergarten children on academic readiness, report card marks, school adaptation, mental maturity, and achievement (Conway, 1968; Evard, 1988; Humphrey, 1988; Pirkle, 1974).
There has often been a lack of continuity and coordination of the kindergarten curriculum with the primary curriculum. This, in part, is due to the half-day kindergarten model which is different than the full-day pattern for subsequent grades as well as the traditional philosophy of kindergarten teachers which focuses on social adjustment to school. Now, the focus has shifted from social to social and academic, with the kindergarten as an integral part of the elementary school's curriculum where kindergarten and primary teachers work together to develop an appropriate course of study for elementary school children (Nurss, 1987).

While the kindergarten program should mesh with the primary grades, the kindergarten curriculum needs to be protected from an inappropriate escalation of academic content. Such expectations could lead to increased testing, a burgeoning retention rate, and other negative consequences (Shepard and Smith, 1988). Rather, the kindergarten curriculum should be a balance between child-centered and content-centered curriculum (California Department of Education, 1988). Each Indiana school corporation has the responsibility of providing a kindergarten program that is appropriate for its children as it takes into account the abilities, interests, and backgrounds of the children who are enrolled in its district.

There is a need for elementary principals to be informed about the importance of early childhood education. A report issued by the Illinois Department of Planning, Research, and Evaluation in July, 1985, after a comprehensive study, stated that principals are unlikely to provide leadership in this area unless they are provided with comprehensive inservice training.

The Indiana Department of Education, in its 1989 Kindergarten Guide, lists the following characteristics of quality kindergarten programs.

Children develop positive feelings about themselves and what they are capable of doing through:

- having many successful experiences
- having opportunities for expressing feelings about activities and interactions with peers and adults
- engaging in making decisions about how to work constructively and cooperatively
Learning experiences are based on the assumption that children can and will learn when the right conditions are provided through:

- Having open-ended learning opportunities that challenge each child regardless of developmental level.
- Planning and implementing activities which use multisensory approaches to acquire skills and knowledge.

Children are actively involved in planning their daily learning experiences through:

- Participating in the selection of their activities.
- Being encouraged to talk about what they have learned.
- Being encouraged to generate their own projects; thereby, allowing them to practice their skills and knowledge.

Children are viewed as individuals with unique needs, interests, abilities, and learning styles and are provided with:

- A wide variety of activities to nurture skill development.
- Many opportunities to practice skills in a broad range of settings.

Curriculum development is built on the assumption that learning for young children is an interactive process which:

- Includes many concrete and manipulative activities.
- Expect active movement of children as they pursue their learning experiences.
- Includes planning and evaluation sessions with the teacher.

Communicative competencies (three basic functions: communication, expression, reasoning) are valued and nurtured through:

- Engaging in genuinely reflective conversations with the child.
- Encouraging child-child conversations in small-group activities.
- Providing something of interest to discuss.

Development of the total child (physical, social, emotional, and intellectual) is fostered through:

- Including activities that nurture both fine and gross motor skills.
- Including opportunities to initiate, develop, and maintain satisfying relationships with others.
including a wide range of learning experiences to stimulate interest
and curiosity about the surrounding world

Full-Day Kindergarten

The number of children enrolled in full-day everyday kindergarten is growing rapidly
in the United States. (This report does not involve full-day alternate-day kindergartens
where children attended for a full day every other day.) In a 1988 survey, 41 states reported
that they had 790,637 students enrolled in full-day kindergarten. The other states,
including Texas with over 260,000 students in kindergarten, do not collect statistics that
break down the number of kindergarten students by half- or full-day enrollment. Twenty-
six of the states financed full-day kindergarten and 12 required children to attend
kindergarten (Humphrey, 1988).

The reasons for offering full-day kindergarten are briefly as follows:
1. There is a renewed interest in academic preparation for later
   school success (ERIC/EECE, 1985).
2. There is an increase in the number of children who have had
   prekindergarten group experiences (ERIC/EECE, 1985). The per-
   centage of children enrolled in prekindergarten programs has
   increased from about 30 percent in 1966 to 50 percent at the
   present time (California Department of Education, 1988).
3. Children are more knowledgeable about their world due to the
   influence of television and family mobility and are ready for a richer school
   program (ERIC/EECE, 1985).
4. The number of mothers of children under 6 who work outside the
   home is much larger than in the past. In 10 years alone between
   1970 and 1980, the percentage increased 34 percent (ERIC/EECE,
   1985).
5. One-way transportation for half-day kindergarten poses an
   especially difficult problem for working mothers and economically
disadvantaged families.
6. Time is available for activities that are presently rushed in the
   half-day program (Illinois State Board of Education, 1985).
7. Children have more opportunities to use facilities such as gymnasiums, cafeterias, auditoriums, and library media centers and to participate in enrichment activities including field trips (Humphrey, 1988).

An additional reason for full-day kindergarten in Indiana is that the average age of its kindergarten children will soon be the highest in the nation. The entrance age will be moved back to July 1 in the 1991-1992 school year and to June 1 in the 1992-1993 school year. A survey of the states revealed the following entrance age data. (See survey form, Appendix A.)

<table>
<thead>
<tr>
<th>Entrance Age Date</th>
<th>Number of States</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1</td>
<td>1</td>
</tr>
<tr>
<td>August 1</td>
<td>1</td>
</tr>
<tr>
<td>August 15</td>
<td>1</td>
</tr>
<tr>
<td>August 31</td>
<td>2</td>
</tr>
<tr>
<td>September 15</td>
<td>15</td>
</tr>
<tr>
<td>September 10</td>
<td>1</td>
</tr>
<tr>
<td>September 15</td>
<td>2</td>
</tr>
<tr>
<td>September 30</td>
<td>5</td>
</tr>
<tr>
<td>October 1</td>
<td>2</td>
</tr>
<tr>
<td>October 15</td>
<td>2</td>
</tr>
<tr>
<td>October 16</td>
<td>2</td>
</tr>
<tr>
<td>November 1</td>
<td>1</td>
</tr>
<tr>
<td>December 1</td>
<td>2</td>
</tr>
<tr>
<td>December 2</td>
<td>1</td>
</tr>
<tr>
<td>December 31</td>
<td>4</td>
</tr>
<tr>
<td>January 1</td>
<td>1</td>
</tr>
<tr>
<td>January 31</td>
<td>1</td>
</tr>
<tr>
<td>No Uniform Date</td>
<td>6</td>
</tr>
</tbody>
</table>
It is clear from the above data that Indiana kindergarten children, when compared to those in other states, will be between one-fourth and one-half year older on the average. Because the mean chronological age is higher, the mean mental age will also be higher. Thus children in Indiana's kindergartens will be older and more ready for a challenging kindergarten curriculum than children from other states.

A large number of studies comparing full-day kindergarten to half-day kindergarten have concluded the following.

1. There are strong academic advantages for full-day kindergarten (Azumi, 1987; Chicago Public Schools, 1987; Goodwin, 1989; Harrison-McEachern, 1989; Humphrey, 1983, 1988; Illinois State Board of Education, 1985; Puleo, 1988, Stinard, 1982). When compared with half-day kindergarten, the consistent trend is either in favor of full-day kindergarten or it shows no difference (Puleo, 1988; Stinard, 1983).

2. There is no evidence that full-day kindergarten causes "burnout" resulting in various participatory attitudinal and academic problems (Stinard, 1983).

**Mandatory Half-Day Kindergarten**

While all Indiana corporations must offer kindergarten, attendance is not mandatory. A survey sent to all 50 states revealed that only 12 states mandate kindergarten attendance. This is a new development, and several other states have indicated that they are moving toward mandating attendance in kindergarten.

A survey of Indiana superintendents (see Appendix B) revealed that 232 out of the 242 who responded feel that mandatory half-day kindergarten attendance would not be a problem. The main concern about mandatory half-day kindergarten from the superintendents who indicated that this would be a problem was that they would have to offer transportation if kindergarten was mandatory. At the present time they either do not transport kindergarten children or transport them only one way. One superintendent indicated that there would not be enough space in the school to accept all children eligible for kindergarten. (See survey form, Appendix B.)
In the 1988-1989 school year, 80,146 public and non-public children attended kindergarten. The public and non-public enrollment the next year in first grade was 90,042, leaving 9,896 or 9.1 percent of the children unaccounted for during their kindergarten year. This is consistent with previous years. As shown in Appendix C, differences in kindergarten and first grade enrollment range between 8,007 to 10,973 or between 8.27 and 10.92 percent since the 1981-1982 school year.

**Fiscal Impact.** Schools will have 9 percent more kindergarten children and may need to hire additional staff depending on the number who attend a particular school. Two-way transportation, morning and noon or noon and afternoon, will need to be provided to all kindergarten children who live far enough from school to qualify for transportation. If attendance in kindergarten is mandatory, children who need to be transported will need that assistance. Lack of two-way transportation is a reason why many children do not attend kindergarten. Working parents have difficulty getting from their places of employment to either deliver or pick up their children at noon. Those who do not work may not have a vehicle available because the 23 percent poverty rate for children under six in 1987 was higher than the rate for any other age group in the United States (School of Public Health, 1990).

In the 1988-1989 school year, 47,773 out of 71,210 or 67.1 percent of the kindergarten children were eligible for transportation. (Generally, children who live one mile or more from school are eligible for transportation.) Projecting that there would be 62,970 children normally enrolling plus 6,946 nonpublic children, there would be 69,916 children attending public and nonpublic kindergarten in 1990-1991 (see Appendix D). Added to the expected public school enrollment of 62,970 children would be 9 percent of 69,916 or 6,292 who do not normally attend kindergarten but would be mandated to do so for a total of 69,262 children. Thus 67.1 percent of 69,262 or 46,475 children would be eligible for transportation. At $348 per child for two-way transportation, the cost for 46,475 children would be $16,173,300. The present one-way cost for 67.1 percent of 62,970 children at $174 per student is $7,351,999. Therefore, the additional cost for mandatory half-day kindergarten transportation would be $8,821,301. The cost for 6,292 additional children at a per pupil expenditure of $2,200 is $13,842,400.

The average cost for a 1,200 square foot kindergarten including rest room and storage area at $85 per square foot is $102,000. There were 3,519 Indiana kindergartens
with a total of 68,377 children in the 1989-1990 school year. This made the average class size 19.43. The additional 6,292 children at 19.43 per half-day class would call for 162 new kindergarten rooms at a cost of $102,000 per room for a total of $16,524,000.

Table 1: Projected Mandatory Half-Day Kindergarten Additional Costs

<table>
<thead>
<tr>
<th></th>
<th>Additional Students</th>
<th>Additional Classrooms</th>
<th>Costs/Student</th>
<th>Costs/Classroom</th>
<th>Total Addtl. Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition</td>
<td>6,292</td>
<td>N/A</td>
<td>$2,200</td>
<td>N/A</td>
<td>$13,842,400</td>
</tr>
<tr>
<td>Transportation</td>
<td>N/A</td>
<td>N/A</td>
<td>$368</td>
<td>N/A</td>
<td>$8,821,301*</td>
</tr>
<tr>
<td>Facilities</td>
<td>6,292</td>
<td>162</td>
<td>N/A</td>
<td>$102,000</td>
<td>$16,524,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$39,187,701</td>
</tr>
</tbody>
</table>

*1. 67.1% of students eligible for transportation reimbursement
2. 69,252 enrollment projected for 1990-91
3. .671 x 69,252 = 46,475 eligible for transportation reimbursement
4. 46,475 x $348 = $16,173,304 for 2-way transportation
5. .671 x 62,970 x $174 = $7,351,999 for current 1-way transportation
6. $16,173,308 - $7,351,999 = $8,821,301 additional costs for 2-way transportation
Mandatory Full-Day Kindergarten

A survey of all 50 states revealed that no state mandates that children attend full-day kindergarten. Florida does finance full-day kindergarten and mandates kindergarten for entrance into first grade, but it does not mandate full-day kindergarten. Some states that fund full-day kindergarten mandate that their school districts offer full-day kindergarten, but they allow parents to opt for a half day for their children's kindergarten for a variety of health, educational, and family reasons.

When asked if it would be a problem if full-day kindergarten were mandated, 211 out of 244, or 86.5 percent, of Indiana superintendents who responded indicated that they had concerns. These doubts centered on the following items.

1. Classroom space (192 responses, 78.7 percent)
2. Staffing (83 responses, 34.0 percent)
3. Transportation (7 responses, 2.9 percent)

Fiscal Impact. Schools will have 6,292 or 9 percent more kindergarten children who would be mandated to attend kindergarten. They will need to provide a program for twice the number of children now attending kindergarten plus the children who have not previously attended kindergarten.

Two-way transportation will need to be provided for 67.1 percent of the projected 62,970 who are expected to enroll in the 1990-1991 school year plus 6,292 children who would be mandated to attend. The $348 per child cost for two-way transportation for 46,475 children is $16,173,300. The present one-way cost for 67.1 percent of 62,970 children at $174 per student is $7,351,999. Therefore, the additional cost for mandatory full-day kindergarten transportation is $8,821,301.

The projected half-day non-mandatory kindergarten enrollment for the 1990-1991 school year is 62,970. The per pupil expenditure is $2,200 for a total of $138,534,000. The cost for a full day for these students would double, so the cost for full-day kindergarten for these students would be $277,068,000. An additional 6,292 would be mandated to attend kindergarten and at $4,400 per pupil, this would cost $27,684,800. Therefore, the per pupil expenditure for mandatory full-day kindergarten would cost an additional $166,218,800 in the 1990-1991 school year.
The average cost for a 1,200 square foot kindergarten including rest rooms and storage area at $85 per square foot is $102,000. There were 3,519 Indiana half-day kindergarten sections with a total of 68,377 children in the 1989-1990 school year. Assuming that each kindergarten had two sections, there were 1,760 kindergartens. The average class size was therefore 19.43 per half day or 38.86 per full day. Based on an estimated 1990-1991 attendance of 69,262 students in mandatory full-day kindergarten, the total number of classrooms needed would be 3,565. The cost for 1,805 additional classrooms at $102,000 per room would be $184,110,000.

Table 2 summarizes the projected additional costs if full-day kindergarten was mandated in the 1990-1991 school year.

<table>
<thead>
<tr>
<th>Table 2: Projected Mandatory Full-Day Kindergarten Additional Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Additional Students</strong></td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Tuition</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Facilities</td>
</tr>
<tr>
<td>Totals</td>
</tr>
</tbody>
</table>

*See Table 1.

**1. In 1989-1990, there were 3,519 half-day kindergarten sections for the 68,377 children enrolled. This represents 1,760 kindergarten classrooms.

2. 68,377/3,519 = 19.43 students per half-day; or 38.86 students per full day.

3. 69,262 (Est. 1990-91 enrollment)/19.34 = 3,565 classrooms

4. 3,565 - 1,760 = 1,805
Voluntary Full-Day Kindergarten
Where Parents Pay Based on a Sliding Scale

A survey of all 50 states revealed that no state has a program where parents are required to pay for the extra half day of full-day kindergarten based on a sliding scale.

A second survey was sent to Indiana superintendents. They were asked their views concerning the sliding scale. A total of 217 out of 238 or 91.2 percent of those who responded believe that this would be a problem. In addition to classroom space, personnel, and transportation problems that relate to increased enrollment, the superintendents listed the following concerns:

1. The enlarged paperwork would be a major problem.
2. There is difficulty now in collecting textbook and lunch fees, and this would compound the issue.
3. The children whose parents value education would be placed at an advantage while placing at a disadvantage those children whose parents chose not to pay or to take advantage of the program even though it is free or provided at a reduced cost.

Fiscal Impact. The projected per pupil expenditure for the 1990-1991 school year is $4,400. Therefore, the cost for half-day kindergarten is $2,200 per student. This excludes transportation cost because some transportation is already provided for kindergarten. Thus the cost to parents would be $2,200 or $12.22 per day for 180 days.

The income eligibility guidelines for free and reduced price meals could be applied on a sliding scale. (See Appendix D.) Those families that fall within the guidelines for free meals could enroll in full-day kindergarten at no cost. Those that qualify for reduced price meals could pay 50 percent of the cost for the program.

The Indiana elementary school enrollment in the 1989-1990 school year was 452,677. Of this amount, 95,901 or 21.2 percent of the children were provided meals at no cost and 21,922 or 4.8 percent were provided meals at a reduced price.
The estimated kindergarten enrollment for 1990-1991 is 22,070. If 21.2 percent or 13,350 children were not assessed a fee, the cost to the state at $2,200 per student would be $29,370,000. Also, if 4.8 percent or 3,023 children paid a reduced rate of $1,100, the cost would be $3,325,300. Therefore, the cost to the state, using a sliding scale based on the free and reduced price lunch program and assuming 100 percent participation, would be $32,695,300.

A more complicated system could be adapted from the Indiana Department of Human Services. Its fee schedule provides that any family whose income falls below 110 percent of the poverty level is not charged a fee. Then a sliding scale based on family income and size provides that parents pay only 20 percent if their family size and gross monthly income is 110 to 120 percent of the poverty level. The scale continues with 40 percent at the 121 to 130 percent level, 60 percent at 131 to 140 percent, and 80 percent at 141 to 150 percent. This approach would cost about the same as that involving the free and reduced price programs in that some parents would pay less and others more on the sliding scale.

If only a portion of kindergarten children would attend the full-day program, corporations might not be able to offer full-day kindergarten in every school. Therefore, transportation costs would rise because of a duplication of bus routes.

School corporations would have to absorb the costs of collecting fees or providing free or reduced price full-day kindergarten. Once again, assuming that all Indiana children would participate and assuming that corporations would collect checks weekly as is done in most programs involving a fee including before- and after-school child care, the 46,597 who would pay the full fee and the 3,023 who would pay a reduced fee would cause 49,620 checks to be accounts for each week. Realizing that there are a minimum of 40 weeks where children are in school at least part of the week, total of 1,984,800 checks would be handled each year in Indiana's elementary schools.
Voluntary Full-Day Kindergarten
Where Parents Are Not Assessed a Fee

Of the states who finance full-day kindergarten, most do not mandate that local districts provide full-day kindergarten, and most allow parents a choice of sending their children to half- or full-day kindergarten. However, a number of states that finance full-day kindergarten mandate that children attend either half- or full-day kindergarten.

A survey of Indiana superintendents disclosed that 99 out of 241 or 41.1 percent of those who responded would have no problem offering voluntary full-day kindergarten at no cost to parents provided that state reimbursement for full-day kindergarten would be the same as for first grade children. It would be a problem, according to 141 or 58.8 percent of the superintendents for the following reasons:

1. There is not enough classroom space.
2. If other districts offered full-day kindergarten, districts would be under pressure to offer the program.
3. Some parents would send children for a half day while others would take advantage of the full day. This would cause a problem for first grade teachers.

Experience in other states where local districts have the option to provide full-day kindergarten shows that there is a gradual shift to full-day kindergarten. Other states also have school districts with a lack of classroom space or lack of enthusiasm to change their kindergarten programs. For example, New York state had only 28,466 or 17.6 percent of its 161,399 kindergarten children enrolled in full-day kindergarten in the 1980-81 school year. Over a 10-year period this has gradually increased to 118,155 out of 187,957 or 62.8 percent full-day kindergarten enrollment.

Wisconsin began funding full-day kindergarten in the 1984-1985 school year. The first year 3,122 out of 57,522 or 5.1 percent attended full-day kindergarten. In subsequent years the percentages were 1985-1986, 6.5 percent; 1986-1987, 7.9 percent; 1987-1988, 9.4 percent; 1988-1989, 11.9 percent; and 1989-1990, 13.0 percent. Over the six-year period, the increase was very gradual.
Illinois is a better example in that it is a neighboring state and began funding full-day kindergarten in the 1986-1987 school year. During the first year 24,064 out of 134,370 or 17.9 percent of Illinois children attended full-day kindergarten. In subsequent years the percentages were 1987-1988, 18.4 percent; 1988-1989, 20.1 percent; and 1989-1990, 34.8 percent.

Some school systems in Illinois, New York, and Wisconsin were immediately ready to convert to full-day kindergarten when state funding became available. They had ample space and the willingness to set up new rooms, add teacher..., redo curriculum, and present options to parents. Other school systems, because of a lack of space or other concerns, opted to either provide full-day kindergarten after local conditions made space available or not to offer the program. The voluntary aspect allowed corporations to accept the full-day program when local circumstances were appropriate. This is not unlike the gradual expansion of half-day kindergarten in Indiana where some corporations offered kindergarten beginning in the 1800s while others were still not providing the program almost 100 years after its start.

Several studies report that there is often initial resistance by some parents to full-day kindergarten. Their concerns focus on unrealistic academic pressure, inadequate rest time for children, and a concern that full-day kindergarten is really baby sitting for working mothers who should be more concerned about their children than augmenting the family income (Illinois State Board of Education, 1985). However, when offered the option of full-or half-day kindergarten, almost all parents select the full-day program (Humphrey, 1988). This initial resistance by some parents is a major reason why schools should offer both the full- and half-day options.
Fiscal Impact. Based on the Illinois model, the costs for the 1990-1991 to 1992-1993 school years would be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Indiana Full-Day Kindergarten Enrollment*</th>
<th>Percent of Illinois Full-Day Kindergarten From First to Third Year</th>
<th>Estimated Full-Day Kindergarten Enrollment Based on Illinois Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1991</td>
<td>62,970</td>
<td>17.9</td>
<td>11,272</td>
</tr>
<tr>
<td>1992-1993</td>
<td>62,970</td>
<td>20.1</td>
<td>12,657</td>
</tr>
</tbody>
</table>

* Based only on the projected enrollment for 1990-1991.

Assuming that Indiana school corporations would have the option of offering full-day kindergarten; that no additional state funds would be provided for classrooms, equipment, or materials; that corporations must offer an option to parents for either half- or full-day kindergarten; that funding would be on the same basis as any other grade level with a full day of reimbursement for full-day kindergarten children and a half day of reimbursement for half-day kindergarten students; and that local property taxes could be increased in proportion to the additional state funded request for full-day students; the cost for the first three years based on the Illinois model using the 1990-1991 per pupil expenditure would be as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Indiana Full-Day Kindergarten Enrollment Based on Illinois Percentages</th>
<th>Estimated Cost at $2,200 per Child</th>
<th>One-Way Addtl. Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1991</td>
<td>11,272</td>
<td>$24,798,400</td>
<td>$1,961,328</td>
</tr>
<tr>
<td>1992-1993</td>
<td>12,657</td>
<td>$27,845,400</td>
<td>$2,202,318</td>
</tr>
</tbody>
</table>
Summary

1. In the past nine years, an average of 9,368 Indiana children have not attended public or non-public kindergarten. This represents an average of 11.1 percent.

2. By the 1992-1993 school year, Indiana kindergarten children will be an average of from three to six months older than kindergarten children in other states due to an earlier entrance-age date. Consequently, Indiana children on the average will be ready for a more challenging kindergarten curriculum.

3. While only 12 states mandate kindergarten attendance at the present time, this is a new development, and several other states are moving to mandate attendance in either half- or full-day kindergarten. No state mandates attendance exclusively for full-day kindergarten.

4. The number of children enrolled in full-day kindergarten is growing rapidly in the United States. Most states that fund full-day kindergarten make it optional to local school districts and to parents.

5. The vast majority of Indiana superintendents do not feel that mandating half-day kindergarten for children is a problem. Two-way transportation would be needed at a cost of $8,821,301; the additional $2,200 per pupil expenditure for 6,292 additional children would be $13,842,400; and 162 new classrooms would cost $16,524,000. Total: $39,187,701.

6. No state presently mandates that children attend full-day kindergarten. Eighty percent of Indiana superintendents surveyed reported that they would not have enough classroom space for full-day kindergarten. Additional transportation would be needed at a cost of $8,821,301; the per pupil expenditure for the additional half-day plus the additional children who would be mandated to attend kindergarten would be $166,218,800; and 1,888 additional classrooms would cost $124,110,000. Total: $359,150,101.

7. No state has a program where parents are required to pay for the extra half day of full-day kindergarten based on a sliding scale. One of the major problems would be the paperwork involved. Additional transportation and new classroom costs are hard to estimate because there is no previous experience to study. Most superintendents indicated on the survey that any full-day kindergarten program should be funded in the same manner as any other grade level and that parents should not be assessed a fee. The estimated cost to the state for those children who would be assessed partial or no fees based on free or reduced lunch program income guidelines would be $32,695,300. Total: $32,695,300.
8. School corporations will gradually convert to full-day kindergarten if they are funded for the extra half day in the same manner as any other grade level. Other states such as Illinois and Wisconsin have had a gradual shift to full-day kindergarten when the extra half day is funded by the state. The main reason for the slow conversion is a lack of classroom space. With state funding, schools with space may immediately take advantage of the program while others, if they choose, can create additional classroom space in ensuing years. Based on the experience in Illinois, the first year cost for additional transportation would be $1,961,328 and the additional per pupil expenditure would be $24,798,400. **Total: $26,759,728.**

**Recommendations**

This study has shown that approximately one out of ten Indiana children do not attend kindergarten. While no data concerning these "missing" children is presented in the report, it is probable that many of the children are among those Indiana students who are not successful in school. Mandatory kindergarten would ensure that all of Indiana's children would have an opportunity to get off to a good start in school. Therefore, it is recommended that attendance in kindergarten be mandated starting in 1993. The time between 1990 and 1993 would be provided to school corporations to allow them to ensure that classroom space would be available and that two-way transportation funds would be budgeted.

Indiana's kindergarten children, because of the statewide early entrance-age date, on the average will be older than children from other states. This, coupled with the realization that about half of the children in the United States attend full-day kindergarten, makes full-day kindergarten attractive. Mandatory full-day kindergarten would be difficult to implement because of the high cost involving classroom construction, transportation, and other related factors. Voluntary full-day kindergarten, where parents pay based on a sliding scale, would not be welcome by schools because of the increased paperwork and would place at a disadvantage those children whose parents would not take advantage of the program.

The movement to full-day kindergarten should be based on experiences of neighboring states including Illinois and Wisconsin where the program is slowly being phased in at the option of local school corporations. **It is recommended that school**
corporations be funded for full-day kindergarten on the same basis as other grade levels with a full day of reimbursement for full-day kindergarten children and a half day of reimbursement for half-day students, that corporations who offer full-day kindergarten must offer an option to parents for either half- or full-day kindergarten, and that local property taxes may be increased in proportion to the additional state funded request for full-day students.
SOURCES OF INFORMATION

Council of Chief State School Officers
Educational Development Center
Educational Research Service
Education Commission of the States
ERIC Clearinghouse on Elementary and Early Childhood Education
ERIC Clearinghouse on Reading and Communication Skills
Indiana Department of Education (Division of Educational Information Systems, Division of Facility Planning, Division of School Food and Nutrition Programs)
Indiana Department of Human Services
Indiana Division of Child Welfare
Indiana Superintendents
Indiana University Consortium on Educational Policy Studies
Indiana Youth Institute
National Conference for State Legislators
State Education Departments
References


Evard, Pamela A. *Early Childhood Education Programs: A Review of the Research and Literature on Selected Factors and their resulting effects on Academic Achievement and Social Behavior.* South Bend: Indiana University of South Bend, 1988.


Full-Day Kindergarten Survey

State:

1. Kindergarten attendance is
   □ mandatory.
   □ not mandatory.

2. The state
   □ finances full-day kindergarten.
   □ does not finance full-day kindergarten.

3. The state
   □ has a uniform starting age for kindergarten. That date is ________.
   □ does not have uniform starting age for kindergarten.

4. The state
   □ has a uniform class size for kindergarten. That size is ________.
   □ does not have a uniform class size for kindergarten.

5. Please complete the following enrollment information. This information is needed to determine financial impact of offering full-day kindergarten to local school districts.

If the state funds full-day kindergarten, please check the year that funding began

<table>
<thead>
<tr>
<th>Year</th>
<th>*Half-Day Kdgn. Enrollment</th>
<th>Full-Day Kdgn. Enrollment</th>
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<td>□ 1989-90</td>
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<td>________________________</td>
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<tr>
<td>□ 1988-89</td>
<td>________________________</td>
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<tr>
<td>□ 1987-88</td>
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<td>________________________</td>
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<tr>
<td>□ 1986-87</td>
<td>________________________</td>
<td>________________________</td>
</tr>
<tr>
<td>□ 1985-86</td>
<td>________________________</td>
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<tr>
<td>□ 1984-85</td>
<td>________________________</td>
<td>________________________</td>
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<tr>
<td>□ 1983-84</td>
<td>________________________</td>
<td>________________________</td>
</tr>
<tr>
<td>□ 1982-83</td>
<td>________________________</td>
<td>________________________</td>
</tr>
<tr>
<td>□ 1981-82</td>
<td>________________________</td>
<td>________________________</td>
</tr>
<tr>
<td>□ 1980-81</td>
<td>________________________</td>
<td>________________________</td>
</tr>
</tbody>
</table>

□ Funding began prior to the 1980-81 school year.

*Includes half-day and alternate-day programs.

Please return to: Jack Humphrey
1 S.E. 9th Street
Evansville, IN 47708

by July 1, 1990
APPENDIX B

Full-Day Kindergarten Survey

1. If half-day kindergarten was mandated in Indiana,
   □ this would not be a problem.
   □ this would be a problem because

2. If full-day kindergarten was mandated in Indiana,
   □ this would not be a problem.
   □ this would be a problem because

3. If full-day kindergarten received state support and was voluntary on the part of school corporations and parents and provided at no cost to parents,
   □ this would not be a problem.
   □ this would be a problem because

4. If full-day kindergarten was available where parents would be required to pay for the program based on a sliding scale,
   □ this would not be a problem.
   □ this would be a problem because

Superintendent School Corporation

Please return to: Jack Humphrey by July 1, 1990
1 S.E. Ninth St. Evansville, Indiana 47708
### APPENDIX C

**NUMBER OF CHILDREN WHO DID NOT ATTEND KINDERGARTEN IN INDIANA BASED ON A COMPARISON OF KINDERGARTEN AND SUBSEQUENT FIRST GRADE ENROLLMENT**

<table>
<thead>
<tr>
<th>School Year</th>
<th>Public Kgn. Enrollment</th>
<th>Non-Public Kgn. Enrollment</th>
<th>Total Kgn. Enrollment</th>
<th>School Year</th>
<th>Public First Gr. Enrollment</th>
<th>Non-Public First Gr. Enrollment</th>
<th>Total First Gr. Enrollment</th>
<th>Difference</th>
<th>Percent Difference</th>
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</thead>
<tbody>
<tr>
<td>1982</td>
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<td>6,726</td>
<td>74,226</td>
<td>1983</td>
<td>73,966</td>
<td>8,757</td>
<td>82,723</td>
<td>8,497</td>
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<td>1983</td>
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<td>7,391</td>
<td>77,340</td>
<td>1984</td>
<td>76,830</td>
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<td>86,430</td>
<td>9,090</td>
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<td>1984</td>
<td>68,891</td>
<td>8,282</td>
<td>77,173</td>
<td>1985</td>
<td>76,254</td>
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<td>3,827</td>
<td>74,426</td>
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<td>77,662</td>
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<td>80,599</td>
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<td>1989</td>
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<td>74494</td>
<td>74641</td>
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<td>71936</td>
<td>73597</td>
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**ACTUAL ABOVE -- PROJECTED BELOW**

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91-92  699  62677  71523  71692  74470  75430  75215  73630  76178  74150  77555  67992  64801  58763  12535  507313  419439  939,986
92-93  670  61512  71190  66023  71507  74785  75839  76478  79275  75581  78754  70837  63239  60427  11553  497334  428113  937,670
93-94  642  68172  69867  65716  65852  71810  75191  77112  79454  76654  80275  71932  65885  58971  10648  493720  435171  940,191
94-95  613  66750  74311  64449  65346  66131  72199  76453  80112  78332  83728  73321  66903  61438  9814  489005  444444  943,578
95-96  590  66664  75816  71477  64328  65824  66490  73412  79428  79485  81727  76302  68195  62388  9043  484011  449525  943,171
96-97  565  66578  75718  69986  71293  64681  66181  67607  76268  78806  84234  76474  70968  65392  8337  481964  450529  941,395
97-98  512  66492  75621  69896  69805  71959  64951  67292  70287  75671  83700  77108  71128  66178  7684  485652  444022  937,900
98-99  519  66407  75525  69806  69715  70101  71983  66042  69910  69887  80370  76449  71718  66327  7082  489578  434441  931,640
99-00  498  65636  75426  69716  69626  70011  70481  73192  68611  69363  74015  73408  71105  66877  6527  494088  423379  924,492
INCOME ELIGIBILITY GUIDELINES
(Effective from July 1, 1990 to June 30, 1991)
FOR THE 48 CONTIGUOUS UNITED STATES, DISTRICT OF COLUMBIA, GUAM AND TERRITORIES

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<th>REDUCED PRICE MEALS</th>
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<td>$ 681</td>
</tr>
<tr>
<td>2</td>
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<td>913</td>
</tr>
<tr>
<td>3</td>
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<td>1,144</td>
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<td>16,510</td>
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<td>1,608</td>
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<tr>
<td>6</td>
<td>22,074</td>
<td>1,840</td>
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<tr>
<td>7</td>
<td>24,856</td>
<td>2,072</td>
</tr>
<tr>
<td>8</td>
<td>27,638</td>
<td>2,304</td>
</tr>
<tr>
<td>For each additional family member add.</td>
<td>+2,782</td>
<td>+ 232</td>
</tr>
</tbody>
</table>

FOR SCHOOL USE ONLY --- FOR APPROVAL OF FREE AND REDUCED PRICE MEAL APPLICATIONS