



**Larry Schweinhart** is an early childhood program researcher and speaker throughout the United States and in other countries. He has conducted research at the High/Scope Educational Research Foundation in Ypsilanti, Michigan since 1975, chaired its research division from 1989 to 2003, and now serves as its president. Among other projects, he has directed the High/Scope Perry Preschool Study, the High/Scope Preschool Curriculum Comparison Study and the longitudinal evaluation of the Michigan School Readiness Program. Dr. Schweinhart received his Ph.D. in Education from Indiana University in 1975 and has taught elementary school and college courses.

# Early Childhood Education: A Sound Investment for Michigan

**Larry Schweinhart, Ph.D., High/Scope Educational Research Foundation**

Participating in a high-quality early childhood program at ages 3 and 4 years not only benefits children and families during this early childhood period, but also pays off for the individual and society over time. The 40-year follow up of the African-American low-income children who participated in the Perry Preschool during the 1960s indicates a \$17 to \$1 payoff in reduced educational costs, higher earnings, and reduced crime. The impact of high-quality early childhood programs is corroborated in other studies.

This report summarizes the major findings from the High/Scope Perry Preschool Study, identifies the components of high-quality early childhood programs that result in the identified outcomes and cost savings, and summarizes other evidence on the impact and returns from other high-quality early childhood programs.

## The High/Scope Perry Preschool Study

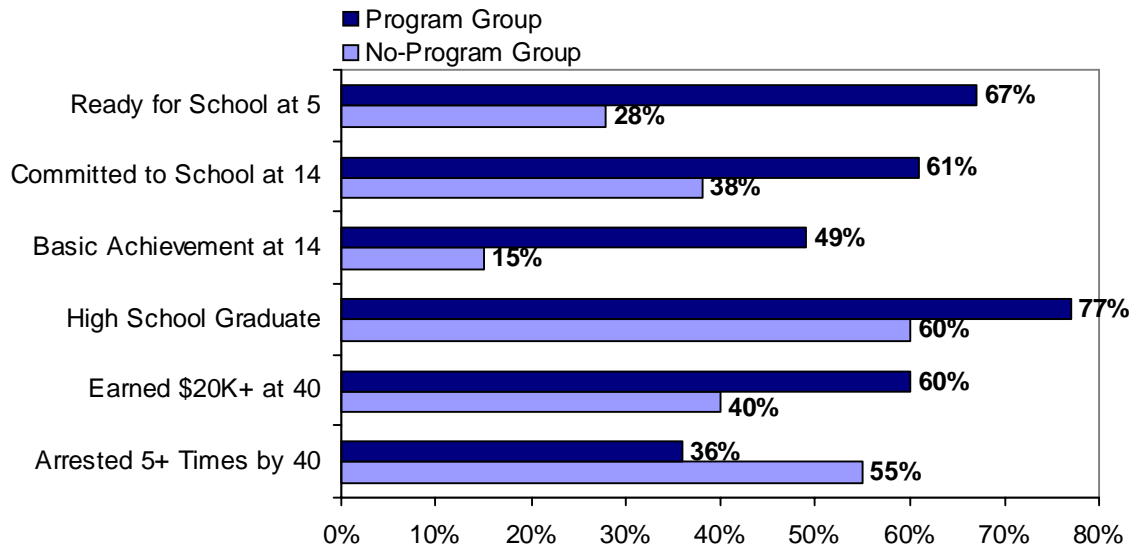
The High/Scope Perry Preschool Study was designed to address questions about whether a high-quality preschool program would help children's development. From 1962 to 1965, 123 young African-American children living in poverty<sup>1</sup> and at risk of school failure were randomly assigned (around half to attend the High/Scope Perry Preschool while the rest did not attend this program). The two groups were almost exactly alike in background characteristics, except that one group got the preschool program and the other did not. The program employed four certified teachers to provide daily class and weekly home visits for 20-25 children. They provided a program of participatory education, in which children could plan, do, and review their own activities.

A rigorous research design that involved random assignment and long term follow-up of the impact of quality early childhood education plus the consistency of the good outcomes over time, along with wide dissemination, have combined to make this an internationally influential study, providing powerful evidence for the importance of investing in quality early childhood programs.

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<sup>1</sup> Family poverty was defined as parents having little schooling (9th grade average) and low occupational status (unemployed or unskilled jobs), along with high household density (1.4 persons per room).

## High/Scope Perry Preschool Study Major Findings

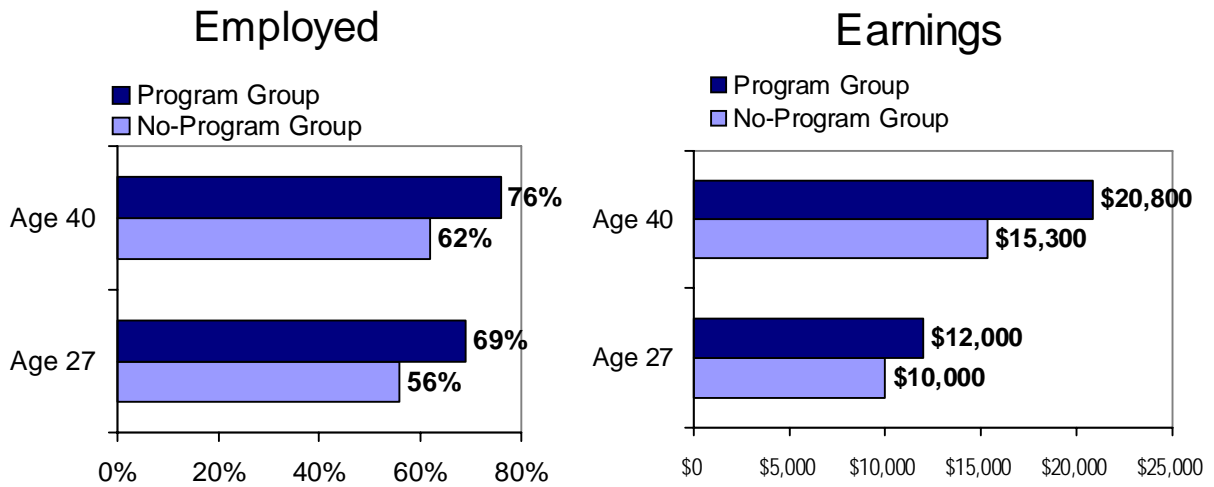


### Major Findings of the High/Scope Perry Preschool Program

- Increased school readiness.** Without the preschool program, 1 out of 3 children was ready for school at age 5, but with the program 2 out of 3 were ready.
- Increased school commitment.** By age 14, the program group was more committed to school.
- Increased school achievement.** Half of the program group attained a basic level of school achievement at age 14, as compared to only 15 percent of the no-program group.
- Increased high school graduation.** More of the program group graduated from high school.
- Improved literacy.** The High/Scope Perry Preschool study found that the program significantly improved children's literacy from after the first few months in the program to the age of 19.
- Increased earnings.** At age 40, three-fifths of the program group earned \$20,000 or more annually, half again as many as the no-program group. The program group had a higher employment rate than the no-program group. At both age 27 and age 40, the program group's employment rate was 23 percent higher than the no-program group's. At both 27 and 40, the program group's earnings were higher than the no-program group's earnings—20 percent higher at age 27, and 36 percent higher at 40. The same pattern appeared for monthly earnings. The absolute consistency of findings for employment, monthly earnings and annual earnings, at ages 27 and 40, is strong evidence that the preschool program had lifetime effects on employment and earnings.

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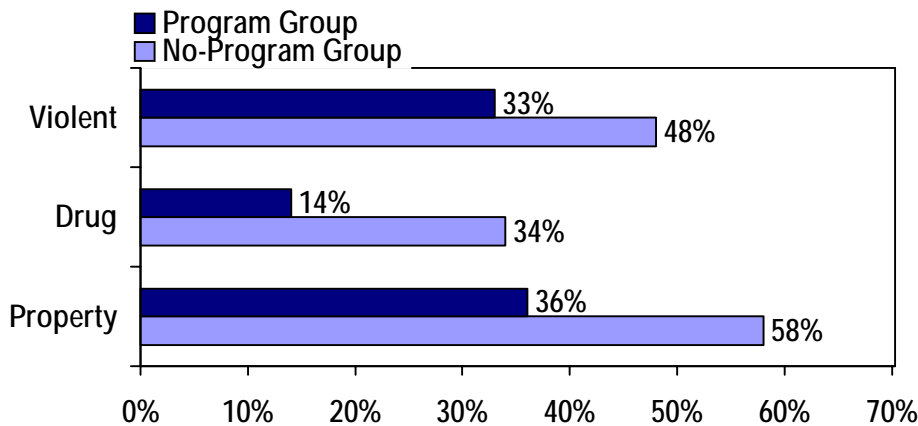
## More Employed, Higher Earnings



**Reduced involvement in crime.** Only two-thirds as many of the program group were arrested 5 or more times. The evidence indicates that the preschool program reduced various types of crime—violent, drug, and property. The 31 percent reduction in violent crime was due mainly to reductions in assault, battery (historically, assault has been the threat of violence and battery has been actual violence or beating), and disorderly conduct. The 59 percent reduction in drug crime was due mainly to reduction in selling seriously dangerous drugs. The 38 percent reduction in property crime was due mainly to reductions in larceny.

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## Fewer Arrested for Various Types of Crimes

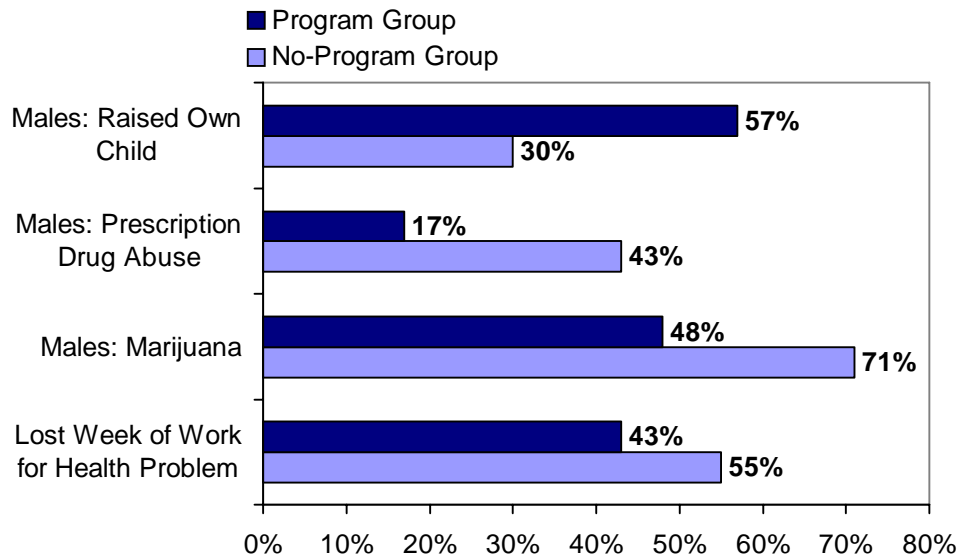


**Reduced drug crime.** 60 percent fewer program than no-program males reported prescription drug abuse and 32 percent fewer program than no-program males reported using marijuana.

**Less time off work for health problems.** 22 percent fewer program than no-program group members lost a week or more of work for health problems.

**Fatherhood.** Almost two-thirds of the program males as compared to only about one-third of the no-program males were involved in raising their own children. This finding was discovered by cross-tabulating males who had a biological child with males who said they had a major role in raising a child.

## Better Health and Family Relations



### Gender Differences

The evidence indicates that the preschool program had strong lasting effects on both males and females, but that these effects were different for males and females.

**88 percent of the program females, but only 48 percent of the no-program females graduated from high school.**

**45 percent of program males as compared to 69 percent of no-program males were arrested 5 or more times by age 40.**

**The public gained by savings in welfare, special education and in higher taxes paid on greater earnings, and both criminal justice system and victim costs of crime. Participants gained from increased earnings.**

**The strongest program effect on females was high school graduation:** 88 percent of the program females, but only 48 percent of the no-program females graduated from high school—only about half as many. There was virtually no difference between the high school graduation rates of program and no-program males, 61 percent versus 66 percent.

**The strongest program effect on males was on arrests by age 40:** 45 percent of program males as compared to 69 percent of no-program males were arrested 5 or more times by age 40, only two-thirds as many. Both the percentages and the difference between them were much smaller for females, 24 percent versus 34 percent.

These findings and others related to crime indicated that the program helped men become more responsible for their own actions.

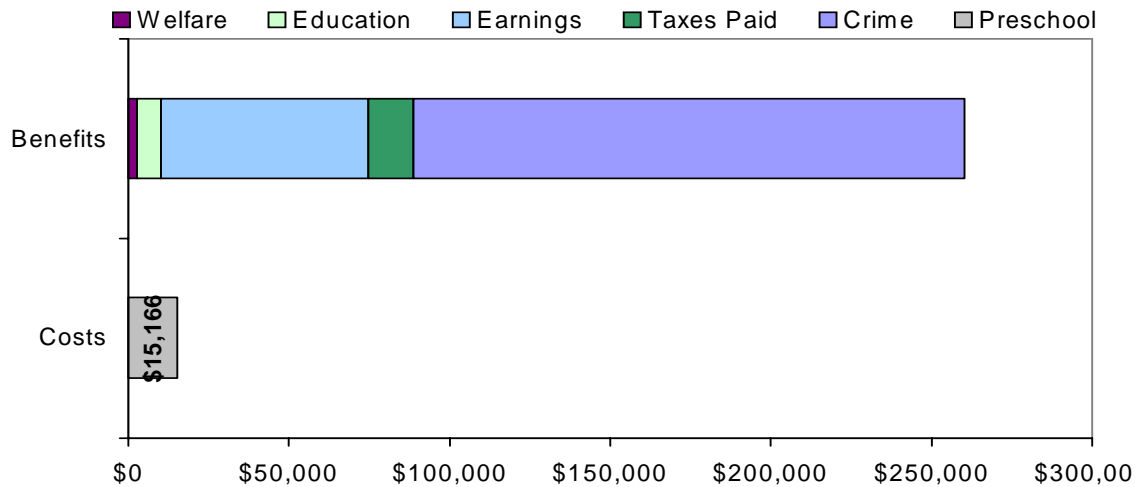
### Economic Returns

The best estimate<sup>11</sup> is that for each dollar invested, the program returned \$12.90 to the public and \$4.10 to participants, for a total return of \$17.07. The public gained by savings in welfare, special education and in higher taxes paid on greater earnings, and both criminal justice system and victim costs of crime. Participants gained from increased earnings.

11. In 2000 constant dollars using a 3% annual discount rate, which is similar to an interest rate over and above inflation.

# Large Return on Investment

(Per participant in 2000 constant dollars discounted 3% annually)



Total return = \$259,999; \$17.07 per dollar invested:  
 \$12.90 to the public, \$4.17 to participants

## Other Studies of Economic Returns on Early Childhood Programs

Other early childhood cost-benefit studies that have also found long-term effects and economic return on investment include the North Carolina Abecedarian high-quality child care study conducted by Craig Ramey and Frances Campbell; the Chicago Child-Parent Centers study conducted by Arthur Reynolds; and the Elmira, New York, nurse home visiting program study conducted by David Olds.

## Policy Implications: Quality Counts

Outcomes reflected the high quality of the High/Scope Perry Preschool. Six quality ingredients made the difference:

- **Children’s participation in their own learning.** The teachers’ role was to help children participate in their own education by having them plan, do, and review their own activities.
- **Adequate staff:child ratios.** High/Scope Perry Preschool Program employed one teacher to every eight children.
- **Parent-teacher partnership.** Teachers visited with families frequently to discuss their children’s development
- **Teacher qualifications.** Every preschool classroom was led by a teacher with a bachelor’s degree and teacher certification.
- **In-service training, support and supervision.** All teachers, whatever their educational background, received adequate training, supervision and assessment to support a participatory educational approach.<sup>111</sup>
- **Length of time in program.** Most of the children in this program attended for two school years.

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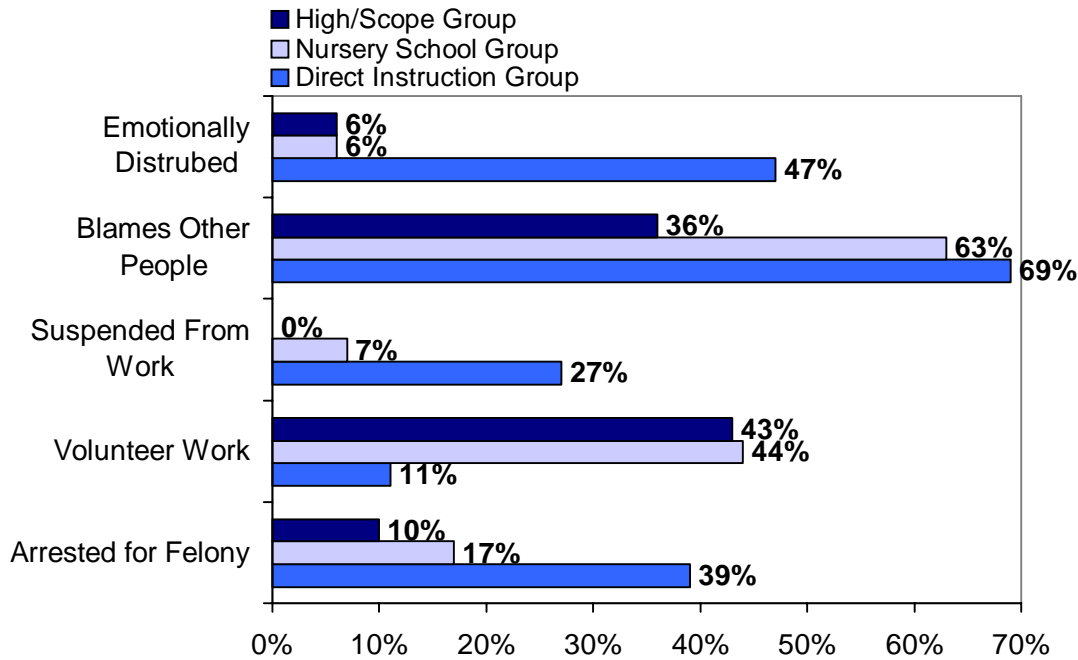
111. The participatory educational approach is supported by systematic observation of programs and children, such as the High/Scope Child Observation Record and Early Literacy Skills Assessment.

## Participatory Education

Other studies have also shown the value of the High/Scope participatory education. These include the following:

1. **The Head Start Family and Child Experiences Survey (FACES)**, examines a nationally representative sample of Head Start children and families. It found that:
  - Head Start children improve by half a point in their **letter and word recognition skills** during Head Start, but that children in High/Scope Head Start classes improve by more than 1½ points.
  - Head Start children improve their rated **cooperation skills** by 2 points during Head Start, while children in High/Scope Head Start classes improve by 2.3 points; and
  - Head Start children exhibit **less hyperactivity** over their Head Start year, dropping from 3.0 to 2.1, while High/Scope Head Start children begin the year at a much lower rate of 1.4 and drop even lower to 1.2.
2. **Training for Quality Study.** This study looked at the effects of High/Scope training-of-trainers programs in a design involving 203 trainers, 244 classrooms, and 200 children. It found:
  - **Better quality learning environments.** Classrooms with High/Scope-trained teachers have better learning environments, daily routines, adult-child interaction, and overall implementation.
  - **Better child outcomes.** Children in these classrooms have better initiative, social relations, creative representation, music and movement skills, and overall development.
3. **The IEA Preprimary Project.** This is a multi-national study, across 15 countries, of preprimary care and education. Information was collected on over 5,000 children in 1,800 settings. Four preschool characteristics were found to predict children's later ability at age 7, regardless of country.
  - Having **free-choice, participatory learning activities** in preschool settings predict children's later language performance. It appears that children's opportunities to have conversations are more important to language growth than anything else, even pre-academic instruction.
  - Having **fewer whole-group activities** in preschool settings predicts children's later intellectual performance; whole-group activities seem to stifle children's intellectual growth.
  - The **amount and variety of materials**, commercial or non-commercial, predicts children's later language performance.
  - **Teachers' years of education** predicts children's later language performance.
4. **The High/Scope Preschool Curriculum Study.** This study examined the long-term effects of three models of preschool education: High/Scope, in which both teachers and children took an active role; traditional nursery school, in which teachers responded to children's interests; and direct instruction, in which teachers provided children with information. While all three groups became more ready for school intellectually, by age 23 the High/Scope and nursery school groups surpassed the direct instruction group socially in a variety of ways.
  - During their years in school, almost none of either the High/Scope or nursery school groups required treatment for

## Advantages of Participatory Education



**emotional disturbance** while almost half of the direct instruction preschool group required such treatment.

- None of the High/Scope group and almost none of the nursery school group were **suspended from work as young adults**, as compared to over one-fourth of the direct instruction group.
- Only 10 percent of the High/Scope group and 17 percent of the nursery school group were ever **arrested for a felony**, as compared to 39 percent of the direct instruction group.
- Almost half of the High/Scope and nursery school groups engaged in **volunteer work** as young adults, as compared to only a few of the direct instruction group.

## A Sound Investment for Michigan

Savings in crime costs alone arising from the High/Scope Perry Preschool Program were over 11 times the cost of the program, but even with the crime savings, the program paid for itself. Some would say at \$8,500 a year per child, the program is too expensive. The public cost of every poor child who does not receive this program is almost \$200,000. We keep choosing to spend \$200,000 on big problems that we could prevent by spending \$15,000 and could significantly reduce the cost of government.

For more information or to contact the speaker, <http://www.highscope.org/>

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