

# High/Scope Research Brief



## Evidence of Effectiveness for Training in the High/Scope Participatory Learning Approach

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The High/Scope Foundation is a leading provider of research-based professional development for adults who educate and nurture children from infancy through early adulthood. In the last decade, High/Scope’s participatory learning methods have been packaged as a set of portable opportunities for learning and community building in after-school settings, community organizations, alternative high schools, and camps. In keeping with a 40-year commitment to rigorous research and evaluation of High/Scope’s learning products<sup>1</sup>, this High/Scope research brief provides evidence of effectiveness for training developed and delivered by High/Scope’s Youth Development Group.

## Summary

Table 1 describes the several High/Scope youth-level training products that are evalu-

ated in this research brief. In total, 585 trainees are represented in the data, summing to over 990 person-days of training that have occurred since 2002. Participants were drawn primarily from school-based and community-based after-school programs in the states of Michigan, New York, Alaska, Florida and Maine

To evaluate the effects of High/Scope’s youth-level training, we use a framework discussed in a recent issue of the Harvard Family Research Project’s Evaluation Exchange newsletter.<sup>2</sup> Professional development for after-school staff should be evaluated at four levels: (1) feedback from participants about satisfaction with the training, (2) demonstration of knowledge gains about youth development and best practices, (3) improvement in the quality of practice at the program site, and (4) positive developmental outcomes for youth and other stakeholders. Levels three and four are the gold standards – we want to know if spending precious time and money

**Table 1: High/Scope Training Reflected in This Research Brief**

Name of Training	Description of Training	Number of Participants*
Youth PQA Basics	One-day training on learning how to complete the Youth PQA program self-assessment method	220
Youth Worker Essentials	Three-day training on youth development theory, interaction strategies and participatory learning methods	155
Youth Worker Intermediate	Three-day training on participatory learning methods and a workshop practicum	64
Training of Trainers	Seven-day training on mastery of the Youth Worker Essentials training agenda	16
Youth-Adult Training Institute	Four-day training for staff and youth teams on participatory learning methods and integration of youth voice into the operation of youth organizations	101
Program Leadership	Three-day training for administrators on how to support staff to implement participatory learning methods and get high scores on the Youth PQA	19

\* Since 2002 with data included in this research brief

to attend a training results in better practice, and ultimately, better outcomes for the kids being served. Surprisingly, there is very little high-quality research on the effects of professional development in the out-of-school-time field. While only a few studies have reported effects at the second and third levels, as of 2004, no studies had examined the fourth level of youth impact.<sup>3</sup> The remainder of this brief discusses findings from several sources of data on the effectiveness of High/Scope training at each of the four levels.

### Level 1: Customer Satisfaction

Table 2 provides ratings for customer satisfaction surveys administered at the end of most High/Scope youth-level training days since 2002. Satisfaction with each of the elements listed in Table 2 are measured on a 5-point scale where 1 = poor and 5 = excellent. **Participants rate the overall quality of the training highly, suggesting that the train-**

**ing experience was well organized, with clear purposes, and that it was delivered by a competent trainer.** Participants also report that the training successfully created opportunities for adult learners to engage and practice with the training content, reflect with others, and do some networking with colleagues. Perhaps most importantly, participants suggested that the content of the training was a good fit with their current work and that administrative support existed to attend the training session and then to implement learnings.

### Level 2: Staff Knowledge Gain Related to Youth Development and Best Practices

Although staff satisfaction with training is important, the next level of evaluation requires evidence that participants actually learned from the experience. To assess knowledge gain, we use participant surveys to capture pre-to-post change in several areas

**Table 2: Ratings for Customer Satisfaction Survey**

N=990 person-days of training	Mean
<b><i>Overall Training Quality</i></b>	
Organization of course	4.32
Clarity of course	4.28
Trainer's skill	4.58
Overall quality of training	4.45
<b><i>Interaction and Engagement During Training</i></b>	
Level of participation	4.39
Opportunities for hands-on learning	4.41
Discussion and sharing with others	4.48
Networking among group members	4.28
<b><i>Fit with Current Work</i></b>	
Applicability of course to current work	4.30
Level of administrative support at your organization for attendance	4.26
Level of administrative support for curriculum/assessment implementation	4.15

**Table 3: Pre-to-Post Knowledge Gain for High/Scope Trainees**

	Average Gains for All Trainees N=193	Average Gains for Trainees With Low Pre- Test Knowledge N=13-43
<i>Theory of Adolescent Development</i> 4 items: cognitive development, social development, cooperative learning, meeting developmental needs through programming	.79**	2.26**
<i>Interaction Strategies</i> 5 items: adult-youth interaction, divergent questioning, encouragement vs. praise, diversity, conflict resolution	.88**	2.37**
<i>Participatory Methods</i> 6 items: choice, active learning, youth planning, youth reflection, cooperative learning, youth leadership	.98**	2.31**
<i>Applications in Service Learning</i> 2 items: youth-led service learning planning, youth-led service learning implementation	.94**	2.08**

+ p ≤ .1; \* p ≤ .05; \*\* p ≤ 01

of youth development knowledge and skills. All knowledge items were measured on a 5-point self-report scale where 1 = no knowledge, 3 = moderate knowledge, and 5 = Strong knowledge. Table 3 presents findings for knowledge gain during the High/Scope Youth Worker Essentials, Youth Worker Intermediate, and Training-of-Trainers. **Participants registered gains in all areas of knowledge and skill development, including developmental theory, interaction strategies, participatory methods, and applications in service learning. Perhaps most importantly, staff who entered the training with very low self-ratings (2 or lower on the 5-point scale) made the greatest gains, suggesting that even staff with very little prior education and training related to youth development can benefit from the High/Scope content.**

### **Levels 3 and 4: Effects of High/Scope Training on Staff Performance and Youth Outcomes**

Despite the positive findings of both customer satisfaction and knowledge gain from participation in High/Scope’s youth level training, **the standard for an effective training product is the effect that it has on staff performance, and ultimately, youth outcomes.** This section provides evidence of training effects on both staff performance and youth outcomes. The findings presented here come from a data set combined from several studies that High/Scope has conducted in recent years<sup>4</sup>, predominantly in after-school programs. Each case/row in the data set provides data related to staff performance and organizational characteristics germane to a single program offering<sup>5</sup>, including whether or not the lead staff for the offering has attended High/Scope training. Many of the cases also include aggregated youth survey data for youth who frequently attend the offering that the case describes.

**Table 4: Effects Size Comparison of Training vs. No-Training Groups**

	Effect Size ( <i>d</i> ) for H/S Training Group
<i>Youth PQA Subscales (N = 177 offerings)</i>	
Safe Environment (5 items)	.04
Supportive Environment (6 items)	.23
Interaction Opportunities (4 items)	.61
Engaged Learning (3 items)	.60
<i>Youth Survey Subscales (N = 40 offerings)</i>	
Interest (2 items)	.47
Growth (2 items)	.72
Challenge (2 items)	.59
Giveback to Community (2 items)	.95

Effect size (*d*) = training group score minus no-training group score divided by the standard deviation of the no-training group.

Group differences were statistically significant at  $p < .05$  level for all subscales except Safe Environment, Supportive Environment, and Interest.

Staff performance and organizational characteristics were measured using the High/Scope Youth Program Quality Assessment (Youth PQA), forms A and B.<sup>6</sup> Youth outcomes were measured on the Youth Survey from Youth Development Strategies, Inc.<sup>7</sup>

Out of 177 offerings where the training history of the staff leader was known, 60 of the staff leaders, or 29.4%, had received High/Scope training.<sup>8</sup> Table 4 compares effect sizes (*d*) across the training and no-training groups on both the High/Scope Youth PQA and the YDSI Youth Survey. For each measure, **the training group had higher scores than the no-training group and effect size estimates were in the moderate-to-large range.**

In order to provide a more rigorous test of the group differences described in Table 4, we estimated multivariate models that controlled for other factors that could also be the cause of group differences.<sup>9</sup> These factors that were likely to influence staff performance and youth reports were (1) age of the youth in the offering, (2) child-staff ratio in the offering, (3) qualifications of program

staff for the organization, (4) program auspice—school or community organization—and (5) urbanicity.

When controlling for these five factors, **participation in High/Scope training was highly associated with higher quality scores on the Youth Program Quality Assessment (YPQA).** Similarly, **participation in High/Scope training was also highly associated with youth survey reports that they were interested in the program, that they experienced growth as a result of attendance, that they were cognitively challenged while at the program, and that they had opportunities to give back to their community as a result of attendance.**

When the size of the effect is considered, these differences in quality and youth survey reports fall in the moderate range of effects sizes for research on education and service interventions. The Appendix Table presents OLS regression models for the effect of High/Scope training on program quality and youth reports.

**Table 5: Effective Professional Development Practices in Schools**

Effective PD Practices From Desimone et al., 2002	Characteristics of Training Evaluated in This H/S Research Brief
<b><i>Focus on explicit practices</i></b> PD is focused on practices that fit the type of content/service that the staff is delivering to students.	Content is primarily applied interaction strategies and participatory methods
<b><i>Active learning</i></b> (1) Opportunities to observe and be observed; (2) Planning for classroom implementation; (3) Reviewing student work; (4) Opportunities to present, lead, and write.	Requires demonstration of high-quality youth workshop to peers. Every training day ends with planning for implementation
<b><i>Reform-type PD structure</i></b> (1) Teacher study groups; (2) Teacher collaboratives, networks, or committees; (3) Mentoring; (4) Internships; (5) Resource centers.	Training series were nearly all part of larger statewide, citywide, or neighborhood-level systemic initiatives. Participants invited to High/Scope annual conference
<b><i>Collective participation</i></b> PD was designed for all staff in organization/unit/department.	Delivered primarily to whole organizations
<b><i>Coherence</i></b> (1) PD was consistent with interest, prior learning, and follow-up; (2) PD was aligned with mandated standards, curriculum and assessments; (3) Participants communicated with colleagues about what they learned after the PD.	Content aligned with ongoing program self-assessment tool (Youth PQA). Some trainees invited to participate in Training-of-Trainers

## Why Does High/Scope Training Work?

One of the key reasons that we think High/Scope’s youth-level training works is because we are conveying scientifically validated ideas about youth work and learning methods that are widely believed to work in practice. However, many people in the field share these ideas about how best to support youth as they learn and develop. We want to know why our training model helps professionals actually learn to implement these widely shared ideas. In order to understand why High/Scope training is effective, it is useful to turn to the research literature on professional development in schools – since there isn’t much relevant research from the out-of-school-time fields.

The best single piece of research comes from a longitudinal sample of about 450 teachers in 30 elementary, middle, and high

schools from across the country.<sup>10</sup> This study is important because it compares the effects of specific elements of professional development and links these professional development experiences to classroom implementation over a period of three years. The first important lesson from the study is that the quality of professional development is linked to the quality of classroom practice. When teachers have high-quality learning experiences, they put what they learn to work with students. However, high quality professional development is hard to find, and the study concludes that most professional development for school staff is of poor quality. The second and perhaps more important lesson, however, is that the quality of professional development and classroom practices vary as much or more within schools as between schools. This means that school organizations “do not have a coherent, coordinated approach to professional development and instruction, at least not an approach that is effective in building consistency among their

teachers.”<sup>11</sup> The moral of the story is that few teachers get access to high-quality professional development, and their school organizations don’t function as selection mechanisms to guide staff toward higher-quality learning experiences.

So what does high-quality professional development look like to these researchers? The professional development practices listed in Table 5 were linked to higher-quality practice in classrooms. Interestingly, these characteristics not only describe the content and training methods (the first two rows), but also the organizational context into which professional development is situated. **Learning happens when organizations support the individual learning efforts of their staff by making sure that all the necessary people are in the room, that training purposes are aligned with real accountability requirements in the work environment, and that staff learning is built into ongoing professional learning communities.**

The right-hand column in Table 5 provides a review of characteristics of the trainings represented in this High/Scope research brief that parallel characteristics of high quality professional development according to the best single pieces of research that we know of on the subject. We believe that these parallel elements of how our training is delivered have a lot to do with the very positive findings presented elsewhere in this brief. **Perhaps most important, most of the individual High/Scope trainees were part of larger systemic initiatives and attended with colleagues from their home organizations. Furthermore, when trainees came to the training they were shown how the content of the professional development were aligned with a validated assessment tool (the Youth PQA), which was in most cases the system-level assessment tool for compliance with mandated quality standards.**

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## Notes

<sup>1</sup> See: Epstein, A. S. (1993). *Training for quality: Improving early childhood programs through systematic inservice training*. Ypsilanti, MI: High/Scope Press; Epstein, A. S. (1999). Pathways to quality in Head Start, public schools and private non-profit early childhood programs. *Journal of Research in Childhood Education*, 13(2), 101–119; Oden, S., Kelly, M. A., Ma, Z., & Weikart, D. (1992). *Challenging the potential: Programs for talented disadvantaged youth*. Ypsilanti, MI: High/Scope Press.

<sup>2</sup> Bouffard, S. (2004, Spring). Promoting quality out-of-school time programs through professional development. *The Evaluation Exchange* [Harvard Graduate School of Education], 10(1).

<sup>3</sup> *ibid.* pg. 10.

<sup>4</sup> The overall data set contains over 200 Youth PQA observations drawn from 71 organizations.

<sup>5</sup> A program offering is a specific activity that is offered as part of a youth program that recurs over time with the same staff, same youth, and same purposes, e.g., computer club, photo-journalism workshop, Lego-math.

<sup>6</sup> The High/Scope Youth Program Quality Assessment (Youth PQA) is a research-validated measure of quality for programs that seek to heighten positive youth development and learning (see [youth.highscope.org](http://youth.highscope.org) for more information on the Youth PQA and its validation studies).

<sup>7</sup> The Youth Survey was developed and validated by Youth Development Strategies, Inc. (for more information visit [ydsi.org](http://ydsi.org)).

<sup>8</sup> The 60 staff who were High/Scope trained had all completed at least one of the following trainings: Youth Worker Essentials, Youth Worker Intermediate, Training-of-Trainers, Youth-Adult Training Institute.

<sup>9</sup> One major caveat is in order. These findings are not the product of a study designed to test the effects of High/Scope training. Indeed it is likely, that some selection factors are at work whereby more skilled youth workers chose to attend the High/Scope training and therefore part of the effects is confounded with the youth workers prior ability.

<sup>10</sup> Desimone, L. M. (2002). Effects of professional development on teachers’ instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), pp. 81–112.

<sup>11</sup> *ibid.* pg. 105.

**Appendix Table: OLS Regression Results for High/Scope Training**

	Dep Var= Youth PQA Score	Dep Var= Youth-Reported Interest	Dep Var= Youth- Reported Growth	Dep Var = Youth-Reported Challenge	Dep Var = Youth- Reported Giveback to Community
Sample Size	N = 122 Offerings	N = 33 Offerings	N = 33 Offerings	N = 33 Offerings	N = 33 Offerings
Age level	.31 (.25)**	-.04 (-.04)	.02 (.02)	-.43 (-.39)*	-.19 (-.20)
Ratio	.00 (.06)	.02 (.30)	.01 (.15)	-.01 (-.09)	.01 (.18)
Staff qualifications	.06 (.06)	.03 (.04)	-.09 (-.14)	.13 (.14)	.16 (.21)
School-based	.35 (.20)+	-.16 (-.20)	-.20 (-.31)+	.08 (.10)	.09 (.12)
Suburban	-.23 (-.12)				
<b>Offering Leader High/Scope Trained</b>	<b>.59 (.32)**</b>	<b>.20 (.25)</b>	<b>.25 (.39)*</b>	<b>.27 (.31)+</b>	<b>.39 (.52)**</b>
R-sq whole model	.20	.19	.28	.25	.42
R-sq increase with addition of High/Scope Training Var	.09	.06	.15	.09	.26

Standardized coefficients in parentheses; +  $p \leq .1$ ; \*  $p \leq .05$ ; \*\*  $p \leq .01$

Dependent variable definitions

*Youth PQA Score* is a global rating consisting of combined scores for 11 items on the Youth PQA observation form for a sample of 122 program offerings with a distinct offering leader.

*Youth-Reported Interest* is score for two items on the YDSI Youth Survey reflecting youth reported interest in the program.

*Youth-Reported Growth* is a score for two items on the YDSI Youth Survey reflecting youth reported sense of personal and skill growth from attending the program.

*Youth-Reported Challenge* is a score for two items on the YDSI Youth Survey reflecting youth reported sense of cognitive challenge from attending the program.

*Youth-Reported Give back to Community* is a score for two items on the YDSI Youth Survey reflecting youth-reported opportunities to give back to the surrounding community as a result of attending the program.

Independent variable definitions:

*Age level* is a three-level variable where 1 = elementary, 2 = elementary and middle, 3 = middle or high school

*Ratio* is the ratio of children to staff

*Staff qualifications* is an overall organization-level rating of combined education and experience for program director and line staff

*School based* is a dummy variable scored 1 = program occurs in a school building

*Suburban* is a dummy variable scored 1 = suburban

*Offering leader High/Scope trained* is a dummy variable scored 1 = Offering leader received High/Scope training