

## **Human Services Research Institute**

8100 SW Nyberg Road, Suite 205 Tualatin, OR 97062 503-885-1436/503-885-1536 (fax)

# Evaluation of First Step to Success: Final Report Executive Summary

First Step to Success is an early intervention program for young children at risk of delinquent behavior. A First Step coach works intensely with the target child, using a system of rewards for behavior, which gradually decreases. Eventually, the teacher takes over the role of coach. In 1999, the Oregon legislature made funds available though the Oregon Commission on Children and Families (OCCF), to enable school districts to have their teachers trained in First Step. OCCF set aside a portion of the First Step funding for an outside evaluation, which is conducted by the Human Services Research Institute (HSRI).

#### **Evaluation Activities**

The efficacy of First Step to Success was initially studied in 1998, by the University of Oregon, Institute on Violence and Destructive Behavior. First Step demonstrated positive results in the controlled environment, giving rise to hopes that it could be similarly effective in the "real world." The current evaluation examines:

- 1) The effectiveness of the First Step intervention on the participating children and its broader impact on peers, families, and schools; and
- 2) The impact of the model when implemented in the "real world" of coaches, teachers, schools, and children throughout the state.

### **Findings on First Step Implementation**

Between January 2000 and April 2001, 31 First Step trainings took place throughout Oregon. Approximately 244 coaches from 22 different counties received training. HSRI received data from 30 coaches.

The First Step model is a very structured approach, with many specific elements and steps. When teachers and coaches actually implement it in a classroom, however, they often find it necessary to adapt the program to fit the classroom environment. Conditions that may complicate implementation of the model include large class sizes, several children in a classroom with behavior issues, curriculum standards that must be met, and schedules in schools that may interfere with the sessions.

HSRI developed a fidelity tool for classroom observations, to assess how consistently the First Step model was being implemented. Researchers from HSRI observed a total of 11 classroom sessions at different schools. In general, teachers implement the program to varying degrees. Although small sample size prohibits conclusive findings, the data suggest that child behavior improves despite deviations from the pure First Step process.

### **Findings on Behavioral Outcomes**

Pre-intervention and post-intervention scores from four different tools (adaptive, aggression, maladaptive, and academic engaged time (AET)) measure the impact of the program. HSRI has limited data on control group children; therefore, the control data from the University of Oregon pilot evaluation was combined with HSRI's data to form a control group. The

combined control group and original pilot experimental group serve as comparisons for HSRI experimental group data. The qualitative and quantitative findings consistently demonstrate the positive effects of First Step on child behavior. In particular:

- During the period of the First Step intervention, the HSRI experimental group improved on all four behavioral measures. On average, the target children displayed increased adaptive behavior, decreased aggression, decreased maladaptive behavior, and improved AET scores. Behavior improvements were even more marked for children who had more severe behavioral issues at the onset.
- Surveys of parents and teachers supplement the behavior measures, suggesting that
  positive changes also occur in parents' perceptions of child behavior and in teachers'
  assessment of overall classroom behavior. These findings are generally not statistically
  significant due to the small sample, but nonetheless offer insight into broader effects of
  First Step activities.

#### **Methodological Issues**

Methodological constraints included the following issues:

- <u>Tracking coaches</u> became a very time consuming component of the evaluation. After the trainings occur, no systematic method is in place to track when First Step is being implemented in a classroom.
- Assuring consistent behavioral data was another difficulty. Some of the early evaluation data used different versions of the scales; despite clarifying the correct forms to use, some coaches continued to use the incompatible scales, making the data unusable.
- Obtaining a control group of children not participating in First Step but who would have been appropriate for the intervention proved to be extremely difficult. HSRI secured only eight children to serve as controls, an insufficient number for valid comparative analysis. It will be important to develop a full control group for future evaluation efforts.

#### Recommendations

Many teachers and coaches give an enormous amount of praise to the First Step model. It is viewed as a beneficial program that offers teachers a new approach to modifying behavior. Even in cases where teachers and coaches don't follow the model exactly, they feel that First Step has provided them with a different way to deal with disruptive children. To make the First Step intervention easier for coaches to implement, HSRI recommends the following:

- HSRI obtained most of the evaluation data from a small group of dedicated coaches.
   Typically, these people are coaches whose primary responsibility is to implement and
   coordinate First Step. School districts that seriously want to implement First Step should
   consider designating particular staff to be coaches.
- 2) Some coaches report having difficulty getting parents to cooperate with the First Step program. It may be helpful for coaches to develop a standardized persuasive approach to enhance parent cooperation; it would also be useful for coaches to keep track of the reasons that parents decline to participate, so that subsequent evaluation can explore the full impact of parent cooperation on child outcomes.
- 3) One of the major changes that has been made to the First Step model is the targeting of children. University of Oregon no longer instructs coaches to screen out of the program children who do not meet the minimum behavioral score levels, but, rather, they

encourage coaches to use First Step with whatever child they believe it will help. It may be important to look at strategies to support coaches so that the children most needing help get it promptly, at the same time as coaches acquire experience in using First Step.

To make future <u>evaluations</u> even richer in information and more revealing in their results, the following changes should be considered:

- Complete tracking: Essential to First Step having an impact on children throughout Oregon is assuring that it is used extensively by the coaches who are trained to do it. The University of Oregon and HSRI should work together to implement a complete and userfriendly tracking mechanism, indicating the frequency with which coaches are using First Step, and likely also increasing the amount of evaluation data that is gathered.
- Control group: As noted above, finding a control group has been exceedingly complex.
  In future evaluations, careful thought should be given to creating incentives for school
  districts to help in identifying children for the control group, and sufficient evaluation
  resources should be devoted to this time-intensive task.
- ◆ <u>District coordinators</u>: Integral to the ability to fully track the use of First Step is the existence of a First Step coordinator in each participating school district. A district coordinator would help to track First Step use and would help assure that evaluation data are gathered.
- ♦ <u>Demographic information:</u> Because of the difficulty in obtaining parent and teacher surveys, and the fairly limited insights that those data provided, continued use of the two surveys may not be a priority. For future evaluations, HSRI recommends that the student profile sheet be modified to include demographic information.
- Model fidelity: Fidelity observations are labor intensive, and can be intrusive unless carefully scheduled and performed. Future evaluations should build in sufficient resources to conduct more classroom observations, to better explore the relationship between fidelity to the First Step model and its impact on child outcomes.
- Continuing use of AET: The AET is the most labor intensive of the four behavior measures. In examining whether it could be deleted from the battery of measures, HSRI found that AET did not correlate significantly with any of the other measures, suggesting that it is indeed capturing some aspect of child behavior that is not contained in the other measures. Thus, the AET should be retained for the time being, and further study should seek to more clearly identify the underlying qualities that the AET is measuring.
- ◆ Long-term effects: The long-term impact of First Step is unknown. Post-intervention measures are currently collected immediately after the program is completed. However, a more extensive longitudinal evaluation is needed, including a control group, to learn how strong the intervention remains and for what period of time.

Continued evaluation activity will reveal just how much the intervention can influence different groups of children, different school districts, and children during their future school years.