

Excellence in Prevention – descriptions of the prevention programs and strategies with the greatest evidence of success

Name of Program/Strategy: Second Step

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1. Overview and description

Second Step is a classroom-based social-skills program for children 4 to 14 years of age that teaches socio-emotional skills aimed at reducing impulsive and aggressive behavior while increasing social competence. The program builds on cognitive behavioral intervention models integrated with social learning theory, empathy research, and social information-processing theories. The program consists of in-school curricula, parent training, and skill development. Second Step teaches children to identify and understand their own and others' emotions, reduce impulsiveness and choose positive goals, and manage their emotional reactions and decision-making process when emotionally aroused. The curriculum is divided into two age groups: preschool through 5th grade (with 20 to 25 lessons per year) and 6th through 9th grade (with 15 lessons in year 1 and 8 lessons in the following 2 years). Each curriculum contains five teaching kits that build sequentially and cover empathy, impulse control, and anger management in developmentally and age-appropriate ways. Group decision-making, modeling, coaching, and practice are demonstrated in the Second Step lessons using interpersonal situations presented in photos or video format.

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2. Implementation considerations (if available)

3. Descriptive information

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|----------------------------------|---|
| Areas of Interest | Mental health promotion Substance abuse prevention |
| Outcomes | 1: Social competence and pro-social behavior 2: Incidence of negative, aggressive, or antisocial behaviors |
| Outcome Categories | Social functioning Violence |
| Ages | 6-12 (Childhood) |
| Gender | Male Female |
| Races/Ethnicities | American Indian or Alaska Native Asian Black or African American Hispanic or Latino White |
| Settings | School |
| Geographic Locations | Urban Suburban Rural and/or frontier |
| Implementation History | An estimated 32,000 schools across the United States have implemented Second Step since the program's inception in 1987. Since 2004, nearly 8 million students and 2 million adults have participated in the Second Step program. |
| NIH Funding/CER Studies | Partially/fully funded by National Institutes of Health: No Evaluated in comparative effectiveness research studies: No |
| Adaptations | No population- or culture-specific adaptations were identified by the applicant. |
| Adverse Effects | No adverse effects, concerns, or unintended consequences were identified by the applicant. |
| IOM Prevention Categories | Universal |

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4. Outcomes

Outcome 1: Social competence and pro-social behavior

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| Description of Measures | The incidence of pro-social behaviors or social competence was measured using teacher, parent, and child surveys and behavioral observations. The surveys used were the School Social Behavior Scales (SSBS), the Achenbach Teacher Report Form (TRF), the Achenbach Child Behavior Checklist (CBCL), and the Parent-Child Rating Scale (P-CRS). |
| Key Findings | In one study, Second Step participants demonstrated higher average rates of pro-social behavior ("engages appropriately with peers," "follows directions from adults") compared with similar students who did not receive the intervention ($p < .01$ and $p < .001$, respectively). Another evaluation found that students who participated in the Second Step program demonstrated higher rates of pro-social behavior in classrooms, on playgrounds, and in cafeterias relative to students in the control group, and these effects continued at least 2 weeks after the intervention ($p < .05$). A third evaluation reported no statistically significant benefits in pro-social behavior. |
| Studies Measuring Outcome | Study 1, Study 2, Study 3 |
| Study Designs | Quasi-experimental |
| Quality of Research Rating | 2.4 (0.0-4.0 scale) |

Outcome 2: Incidence of negative, aggressive, or antisocial behaviors

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|--------------------------------|--|
| Description of Measures | The incidence of negative, aggressive, or antisocial behaviors was measured using teacher, parent, and child surveys and behavioral observations. The surveys used were the School Social Behavior Scales (SSBS), the Achenbach Teacher Report Form (TRF), the Achenbach Child Behavior Checklist (CBCL), and the Parent-Child Rating Scale (P-CRS). |
| Key Findings | Teachers reported fewer antisocial behaviors among Second Step participants compared with similar students who did not receive the intervention ($p < .001$), primarily as a result of first-year implementation of the program. The change was greatest among students who had high baseline ratings for antisocial behavior. |

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| | Another evaluation found lower rates of physically antisocial behavior in playground and cafeteria settings at least 2 weeks after the intervention ($p = .03$). Physical aggression in the classroom setting continued to be reduced 6 months after the intervention ($p = .03$). A third evaluation found that teacher-reported antisocial behavior decreased at a school using Second Step while it increased at a similar school without the intervention ($p < .05$). |
| Studies Measuring Outcome | Study 1, Study 2, Study 3 |
| Study Designs | Quasi-experimental |
| Quality of Research Rating | 2.4 (0.0-4.0 scale) |

5. **Cost effectiveness report (Washington State Institute of Public Policy – if available)**
6. **Washington State results (from Performance Based Prevention System (PBPS) – if available)**
7. **Who is using this program/strategy**

| Washington Counties | Oregon Counties |
|--|------------------------|
| Chelan/Douglas, Ferry/Stevens, Island, Klickitat, Lincoln, Pend Oreille, Spokane, Upper Skagit Tribe | |

8. Study populations

The studies reviewed for this intervention included the following populations, as reported by the study authors.

| Study | Age | Gender | Race/Ethnicity |
|----------------|------------------|------------------------|--|
| Study 1 | 6-12 (Childhood) | 54% Male 46% Female | 79% White 11% Asian 5% Black or African American 4% Hispanic or Latino 1% American Indian or Alaska Native |

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|----------------|------------------|-----------------------------|-----------------------------|
| Study 2 | 6-12 (Childhood) | 51.8% Male 48.2% Female | Data not reported/available |
| Study 3 | 6-12 (Childhood) | Data not reported/available | Data not reported/available |

9. Quality of studies

The documents below were reviewed for Quality of Research. Other materials may be available. For more information, contact the developer(s).

Study 1

Grossman, D. C., Neckerman, H. J., Koepsell, T. D., Liu, P. V., Asher, K. N., Beland, K., et al. (1997). Effectiveness of a violence prevention curriculum among children in elementary school: A randomized controlled trial. *Journal of the American Medical Association*, 277(20), 1605-1611.

Study 2

Frey, K. S., Nolen, S. B., Van Schoiack-Edstrom, L., & Hirschstein, M. K. (2005). Effect of a school-based social-emotional competence program: Linking children's goals, attributions, and behavior. *Applied Developmental Psychology*, 26, 171-200.

Study 3

Taub, J. (2001). Evaluation of the Second Step violence prevention program at a rural elementary school. *School Psychology Review*, 31 (2), 186-200.

Supplementary Materials

Frey, K. S., Hirschstein, M. K., & Guzzo, B. A. (2000). Second Step: Preventing aggression by promoting social competence. *Journal of Emotional and Behavioral Disorders*, 8(2), 102-112.

Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables

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6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see Quality of Research.

| Outcome | Reliability of Measures | Validity of Measures | Fidelity | Missing Data/Attrition | Confounding Variables | Data Analysis | Overall Rating |
|--|-------------------------|----------------------|----------|------------------------|-----------------------|---------------|----------------|
| 1: Social competence and pro-social behavior | 2.3 | 2.5 | 2.0 | 2.0 | 2.3 | 3.3 | 2.4 |
| 2: Incidence of negative, aggressive, or antisocial behaviors | 2.3 | 2.5 | 2.0 | 2.0 | 2.3 | 3.3 | 2.4 |

Study Strengths

The strengths of the Second Step program include the combined use of systemic direct observation and self-report data in longitudinal designs with multiple methods of data collection. Measures are known in the field and have appropriate psychometric properties, and appropriate analyses were utilized.

Study Weaknesses

Attrition was high, and a large number of missing data was acknowledged in one of the studies. The impact of culture, socioeconomic status, and race/ethnicity was unclear, and these may be potential confounds. One of the studies did not employ a true randomized study design.

10. Readiness for Dissemination

The documents below were reviewed for Readiness for Dissemination. Other materials may be available. For more information, contact the developer(s).

Dissemination Materials

Borch, P. (2002). Second Step staff training video: Grades 1-5 [VHS]. Seattle, WA: Committee for Children.

Borch, P. (2002). Second Step staff training video: Middle school/junior high [VHS]. Seattle, WA: Committee for Children.

Borch, P. (2002). Second Step staff training video: Preschool/kindergarten [VHS]. Seattle, WA: Committee for Children.

Committee for Children. (1997). Second Step middle school/junior high: Level 1 foundation lessons. Seattle, WA.

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Committee for Children. (1997). Second Step middle school/junior high: Level 2 skill-building lessons. Seattle, WA.

Committee for Children. (1997). Second Step middle school/junior high: Level 3 skill-building lessons. Seattle, WA.

Committee for Children. (2002). Second Step grade 1 curriculum (3rd Ed.). Seattle, WA.

Committee for Children. (2002). Second Step grade 2 curriculum (3rd Ed.). Seattle, WA.

Committee for Children. (2002). Second Step grade 3 curriculum (3rd Ed.). Seattle, WA.

Committee for Children. (2002). Second Step grade 4 curriculum (3rd Ed.). Seattle, WA.

Committee for Children. (2002). Second Step grade 5 curriculum (3rd Ed.). Seattle, WA.

Committee for Children. (2002). Second Step preschool/kindergarten curriculum (3rd Ed.). Seattle, WA.

Committee for Children. (2002). Second Step preschool/kindergarten--Grade 9 trainer's manual (3rd Ed.). Seattle, WA.

Committee for Children. (2002). Second Step program preview [CD-ROM]. Seattle, WA.

Committee for Children. (n.d.). Second Step: Evaluating the Second Step program--Tools and recommendations [Handout]. Seattle, WA.

Committee for Children. (n.d.). Second Step: Steps for successful implementation in schools [Handout]. Seattle, WA. Second Step Fall 2006 Training Catalog

Second Step Middle School Catalog and Order Form

Second Step Preschool/Kindergarten--Grade 5 Catalog and Order Form

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.

| Implementation Materials | Training and Support Resources | Quality Assurance Procedures | Overall Rating |
|---------------------------------|---------------------------------------|-------------------------------------|-----------------------|
| 4.0 | 4.0 | 3.5 | 3.8 |

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Dissemination Strengths

The implementation materials for this program are very impressive. Goals and expected outcomes are clearly defined. Materials are colorful, well organized, and complete. Sessions are well outlined for easy implementation with clear instructions and guidance for the teacher/instructor. Video materials are of high quality and include scenarios for discussion that complement the print curriculum. Materials are culturally sensitive and inclusive. The training videos and teacher's guides provide comprehensive and detailed instructions for instructors and administrators. Administrator guides explain how to incorporate the program into the school community and integrate it with the grade-level curriculum. Specific guidance is given for evaluating the impact of the program, including options for process and outcome evaluations.

Dissemination Weaknesses

Program evaluation and quality assurance would be enhanced if authors provided a method for quantifying student disciplinary events related to anger management.

11. Costs (if available)

The information below was provided by the developer and may have changed since the time of review. For detailed information on implementation costs (e.g., staffing, space, equipment, materials shipping and handling), contact the developer.

| Item Description | Cost | Required by Program Developer |
|--|----------------------------------|--------------------------------------|
| Pre-K DVD kit | \$289 each | Yes |
| Grades 1-5 kits | \$189 each | Yes |
| Level 1 foundation lessons (middle school) | \$299 per set | Yes |
| Level 2 skill-building lessons (middle school) | \$199 per set | Yes |
| Level 3 skill-building lessons (middle school) | \$299 per set | Yes |
| Family Guide | \$369 each | Yes |
| Family Guide and pre-K DVD kit | \$619 each | Yes |
| Family overview video | \$39 or \$59 depending on format | Yes |
| 2-day training at a regional location | \$525 per person (pre-K through | No |

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| | middle school) | |
| 2-day, on-site training | \$7,500 for up to 25 participants (pre-K through middle school) | No |
| 1-day, on-site training | \$4,000 for up to 40 participants (pre-K through middle school) | No |
| 1-day, on-site Family Guide facilitator training | \$4,000 for up to 40 participants (pre-K through grade 5) | No |
| Limited telephone/email technical assistance | Free | No |
| On-site implementation support consultation | \$1,500 | No |
| Program implementation and outcome assessment tools | Free | No |

12. Contacts for more information

For information on implementation:

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