

## Overview of Evidence Base: Partnership Model and Delivery System



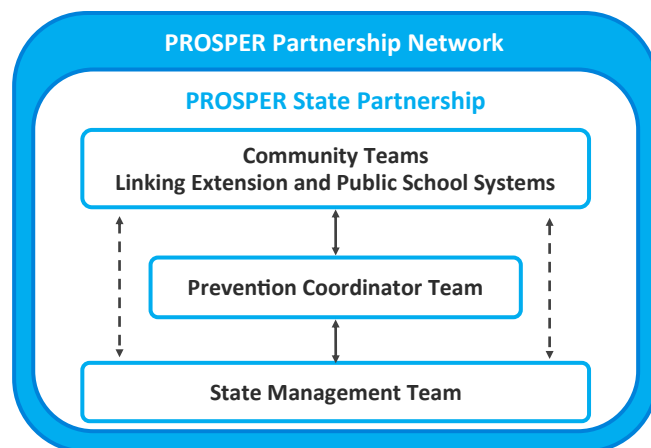
**PROSPER** (PROmoting School-community-university Partnerships to Enhance Resilience) is an **evidence-based delivery system** for supporting sustained, community-based implementation of scientifically-proven programs for youth and their families.<sup>1</sup> This overview highlights key findings selected from over 85 journal articles.

**Challenges Addressed by PROSPER.** There are numerous prevention programs available that aim to reduce risky youth behaviors or strengthen families. However, most of these programs have not been tested, meaning their effectiveness is unknown. Even when an **evidence-based intervention (EBI)** — a program that has been evaluated and shown to work within a research study — is used, there are many reasons why the effort may fail. These include difficulty with participant recruitment, poor implementation, or a lack of strategic planning and fundraising to sustain programming. In the end, youth, their families, and society pay a big price for programs that don't work, and for ineffective delivery of programs that do work.

**The PROSPER Solution.** After Iowa State University researchers teamed up with **Cooperative Extension** agents for assistance with program delivery for several NIH-funded research studies, beginning in 1991, the advantages of this type of partnership became apparent.<sup>2</sup> This set the stage for the original PROSPER study that started in 2001. The randomized-controlled PROSPER research project has been a joint effort between researchers at the Partnerships in Prevention Science Institute at Iowa State University and the Prevention Research Center at Pennsylvania State University. It was funded by the National Institutes of Health and started with around 11,000 middle school-aged youth and their families from 28 communities.

PROSPER research has been recognized by two review panels known for the rigor of their standards of evidence: Top Tier and Blueprints for Healthy Youth Development. The Social Impact Exchange has selected PROSPER for its index of top nonprofits increasing social impact, the S&I 100. PROSPER and the programs on its menu also have received **many other national-level awards and recognitions**; for example, PROSPER was recently featured in "Who's Leading the Leading Health Indicators." (<http://content.govdelivery.com/accounts/USOPHSODPHPHF/bulletins/10a3de0>)

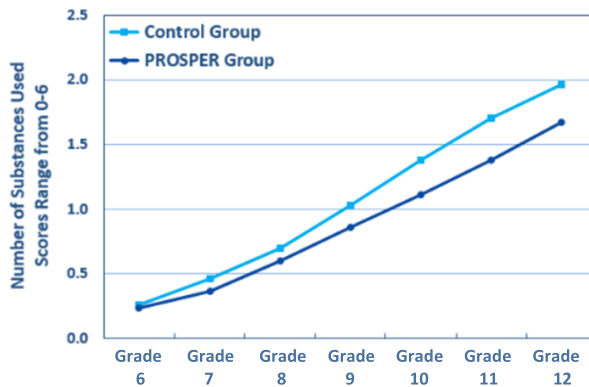
**How PROSPER works.** The PROSPER State Partnership has a three-tiered structure that links university-based prevention experts with community-based teams of volunteers via Prevention Coordinators (Extension-based professionals who provide support to each local team). PROSPER uses the infrastructure of two existing systems — **the Cooperative Extension System at land grant universities and the public school system** (see figure).<sup>1,3</sup> Each State Partnership is connected to the **PROSPER Partnership Network** — a vehicle to build capacity for reaching youth and families across the United States with evidence-based prevention programming.<sup>1</sup>



## Examples of positive outcomes and long-term reductions in risky youth behavior

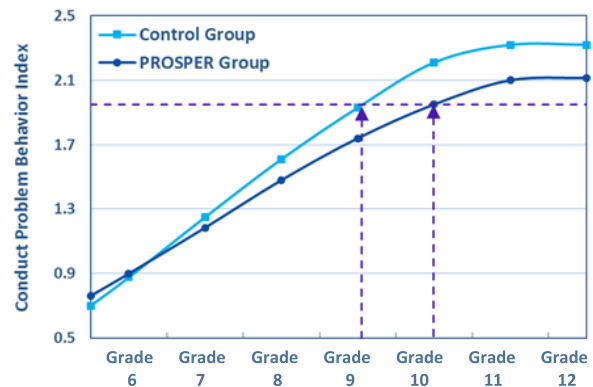
Youth participating in programs implemented through the PROSPER delivery system scored **significantly lower on a number of negative behavioral outcomes**, including drunkenness, cigarette use, marijuana use, use of other illicit substances, and conduct problem behaviors, up to 6½ years past baseline; **in many cases higher-risk youth benefited more.**<sup>4-6</sup>

**PROSPER Impact on Illicit Substance Use Index: Trajectories Through 6.5 Years Past Baseline<sup>5</sup>**



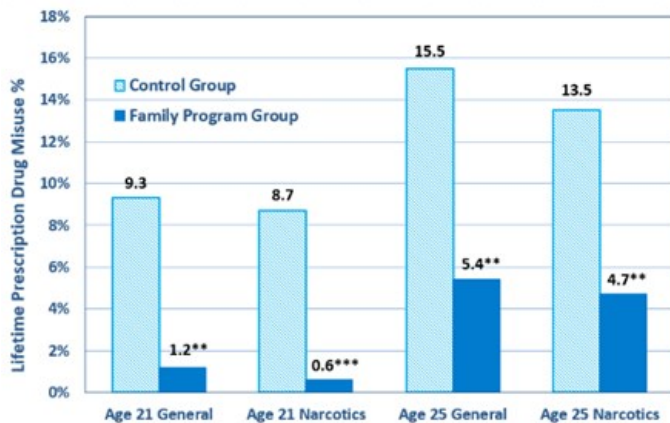
*Growth of use significantly lower; significant differences at multiple time points, including 11<sup>th</sup> and 12<sup>th</sup> grades.*

**PROSPER Impact on Conduct Problem Behaviors: Trajectories Through 6.5 Years Past Baseline<sup>6</sup>**



*Significant differences in growth, with ≈11-month delay in reaching 9<sup>th</sup> grade control group level; significant at all follow-up time points.*

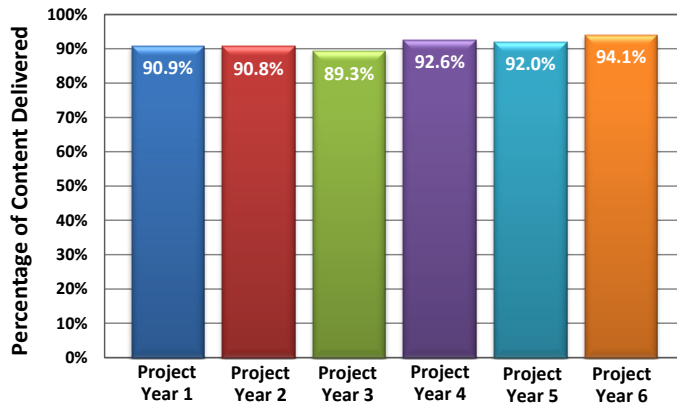
## Earlier study of family program on menu shows outcomes lasting into young adulthood



\*\*\*p<.001; \*\*p<.01; Relative Reduction Rates = 65%-93%

- **Reduced lifetime prescription drug misuse** (see figure).<sup>7</sup>
- Reduced exposures to substance use (protective shield effect).<sup>8-9</sup>
- Reduced lifetime STD rates and substance use in young adults.<sup>10-11</sup>
- Plus, multiple positive outcomes up through 12<sup>th</sup> grade, including better grades and economic benefits.<sup>12-15</sup>

## Sustained implementation quality and reduced costs<sup>16</sup>



### Effective Community Teams, Cost-Efficient Programs

- Community **teams were effectively mobilized.**<sup>1,17-18</sup>
- Community teams achieved relatively **high recruitment and participation rates** for the multi-session family program.<sup>19</sup>
- Community teams achieved **high levels of implementation quality**, with greater than 90% adherence for both the family and school programs, up to six consecutive years (see figure).<sup>1,16</sup>
- The PROSPER Delivery System is **cost-efficient and cost-effective** (see figure).<sup>20-21</sup>
- PROSPER teams had a significantly more **positive view of Cooperative Extension and of local school leadership.**<sup>22</sup>

### PROSPER Reduction in Program Implementation Costs<sup>20-21</sup>

	PROSPER Low Estimate	PROSPER High Estimate	Estimate from Economist Report*
Family Program (SFP 10-14): PROSPER implementation vs. non-PROSPER	<b>\$278.56**</b>	<b>\$348.25**</b>	<b>\$851.00</b>
School Program (included LifeSkills Training, All Stars, or Project Alert)	\$8.94	\$26.74	\$27.00

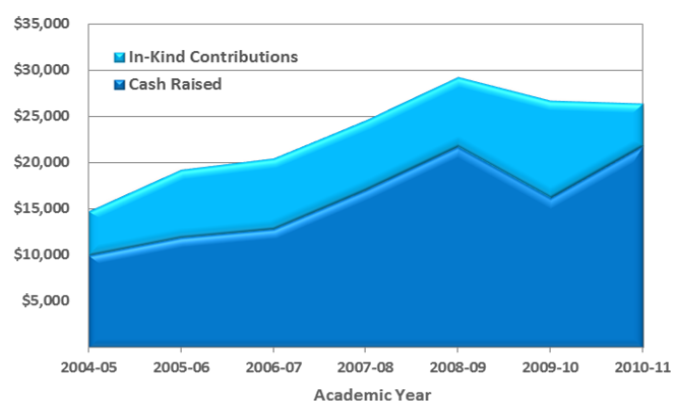
\*Based on 2004 Washington State Institute for Public Policy Report; PROSPER estimates based on costs specified in Citation #20.

\*\*Implementation costs are 59-67% lower than estimates from earlier health economists' report.

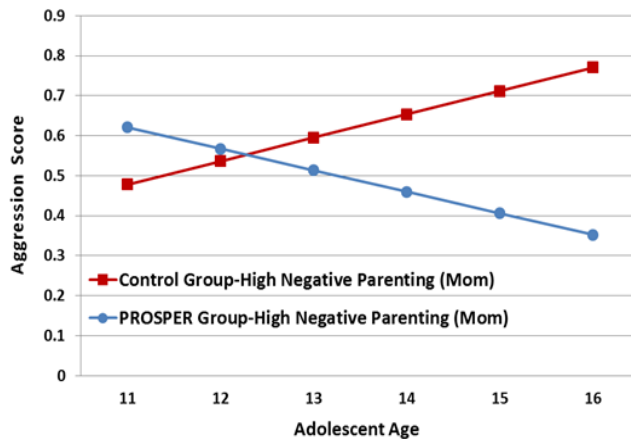
## Sustainability of teams

- Community teams have generated funding and resources to sustain both team operations and delivery of family- and school-based EBIs, **averaging over \$23,000 per team each year** (see figure).<sup>1,23-24</sup>
- Most community teams have **sustained their programming efforts for 11 years**, after progressing through a series of developmental phases.<sup>23-25</sup>

### Average Total Contributions by Academic Year



## Other positive outcomes: Parents, peers and positive gene by environment interactions



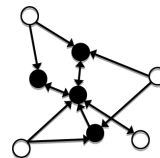
—Gene by environment interaction analyses showed that PROSPER **interacts with a genetic factor to reduce effects of negative parenting on youth aggression** and to enhance the effects of positive parenting on underage drinking.<sup>26-27</sup>

*For youth who have a variant of a dopamine-related gene (DRD4), PROSPER strongly reduced the effects of poor parenting on aggressive behavior from ages 11-16 (see citation for more information).*

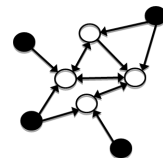
- PROSPER demonstrated **positive effects on family strengthening, parenting, and youth skill outcomes** that influence longer-term adolescent behavioral outcomes.<sup>28</sup>
- Peer social network analyses showed that PROSPER **reduces negative peer influences, shifting peer influence toward non-users** (see figure).<sup>29</sup>

○● (Black dot = substance user, White dot = non-user)

— Indicates that non-user nominated a substance user as a friend



**Illustrative  
Peer  
Networks**



- More nonusers choose substance users as friends
- Peer network favors use

- More substance users choose non-users as friends
- Peer network opposes use

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We've Got Prevention Down To A Science

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When Youth PROSPER, We All Do

**We've got prevention down to a science.**

Most prevention programs for youth promise to reduce problem behaviors. And they can look good. On paper. But do they work?

Prevention scientists are discovering that results often fall far short of expectations. For some programs, it's because they were not tested. For others, it's ineffective implementation. For still others, it's the lack of continued financial and community support for long-term sustainability, even when the program has positive results.

Learning from this research, we have developed a system for implementing quality, evidence-based prevention programs. Our approach has been tested with over 10,000 youth and their families since 2001.

**It's called the PROSPER Delivery System.**

PROSPER was recently featured in the Office of Disease Prevention and Health Promotion's *Who's Leading the Leading Health Indicators?* - Substance Abuse.

[Click here to find out more](#)

PROSPER has been recognized by two of the most rigorous review panels for prevention programs, the *Coalition for Evidence-Based Policy and Blueprints for Healthy Youth Development*.

[Click here to find out more](#)

**Please visit our website: [helpingkidsPROSPER.org](http://helpingkidsPROSPER.org)**

For more information, contact Dr. Richard Spoth, Director of the Partnerships in Prevention Science Institute, Ames, Iowa or email Denise Nebbe at [denisej@iastate.edu](mailto:denisej@iastate.edu). This overview focuses on a summary of positive findings; the reader is encouraged to review the citations for their comprehensive coverage of results.

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