WHAT WORKS FOR EDUCATION: Lessons from Experimental Evaluations of Programs and Social Interventions to Enhance Educational Outcomes

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OVERVIEW

The effective education of American children and youth is widely considered an important goal. For individuals, education traditionally has been regarded as a door to expanded opportunities. For the nation, an educated workforce has come to be recognized as essential to ensuring competitiveness in a global economy. An important question for those concerned with improving adolescent functioning is how to increase students' levels of educational functioning.

This review is based on 40 social interventions and programs that take place during out-of-school time (see table). These interventions have been evaluated in a random assignment experiment and focus on educational outcomes from the Child Trends database of experimental evaluations of social interventions for children and youth – LINKS (Lifecourse Interventions to Nurture Kids Successfully).[1] We did not include evaluations of school curricula in our review. The table offers summaries of what works (and what doesn't work) with regard to interventions. It is important to note that many evaluated programs include multiple components. Consequently, we can usually determine only that programs work or do not work; rarely can we isolate the exact component of a complex intervention that is responsible for producing the effects.

WHAT WORKS

This fact sheet provides information to help individuals design an effective intervention that targets educational outcomes. Lessons learned from evaluations of interventions include:

- **Most of the out-of-school-time programs that target education outcomes have positive impacts**. Of 40 programs studied, 34 showed impacts on a measured educational outcome area such as academic achievement and school adjustment.

- **Programs that include teachers are effective in influencing educational adjustment and achievement.**[2] All nine of the programs that included teachers as the program provider were effective in positively influencing education outcomes. However, it is important to note that most programs with teachers are also school-based. Therefore, it is not possible to determine whether school factors account for these impacts.

- **Programs that provide academic support or homework help have positive impacts on education outcomes**. Thirteen evaluated programs provided academic support or homework help, and all found some evidence of effectiveness.

- **Programs with frequent and intense involvement (1 to 8 hours a day, 5 to 6 days a week) have been found to have positive impacts on academic outcomes**, including self concept, educational expectations, academic achievement, high school completion, and post-secondary attendance. All four program evaluations of such programs reviewed had positive results.[3]

- **Programs providing services on an ongoing basis also improve education outcomes**, such as increasing academic self concept, school engagement, and educational expectations, as well as increasing academic achievement, high school completion, and post-secondary attendance. Six experimentally evaluated programs provided services on an ongoing basis.[4] These programs ranged in duration from a single year to multiple years. Programs also varied as to whether services were offered during an academic year and/or during the summer.

- **A similar proportion of programs target academic learning as target school adjustment** (30 programs out of 34 vs. 21 out of 24 programs), and 31 of 40 experimentally evaluated programs show some evidence of program effectiveness. Fewer interventions target both school adjustment and academic learning (18 of 40 experimentally evaluated programs); of these 18 programs, 16 were found to work.

- **The majority of evaluated programs target at-risk children.** Of 40 programs studied that target education, 29 focus on economically disadvantaged and/or at-risk children and youth.

- **Research does not yet address programs targeting achievement motivation**. None of the program evaluations we examined included achievement motivation as an outcome.

MIXED REVIEWS

- **Programs with employer partnerships (e.g., employment/education programs) are not consistent at positively influencing academic achievement**. Only two programs included employer partnerships.[5] One program had positive impacts on high school completion, but only for women.[6] The other program had positive impacts on school engagement and educational expectations; however, it did not have consistent impacts on academic achievement.[7]

- **Programs that provide monetary support either through work programs or other means are not consistently effective** at increasing academic achievement, high school completion, or postsecondary attendance. Five of six programs did not consistently work;[8] the sixth worked for the one outcome it measured. Some programs had inconsistent results on measured outcomes.[9] Other programs had sub-group differences or site differences in impacts.[10]

NEEDED RESEARCH

- None of the program evaluations we examined included achievement motivation as an outcome. To our knowledge, few programs have targeted achievement motivation.
- Little information is available on the fidelity of implementation, that is, whether programs are carefully and accurately implemented. Likewise, little information is available on the quality of implementation.
- Program providers should examine subgroups for differences in outcomes.

CONCLUSION

Based upon experimental program evaluations, effective programs tend to feature teacher-provided interventions, frequent and intense involvement, and academic support. Also, these programs target both school adjustment as well as academic learning. However, it may be more cost-effective to target a narrow range of outcomes or a single outcome and align an intervention to address that outcome.

ENDNOTES

[1] http://www.childtrends.org/links

[2] Career Academies, Career Beginnings, Carolina Abecedarian Program, Early Training Project, Perry Preschool Project, First Steps to Success, Raising Healthy Children, Teen Outreach Program, Woodrock Youth Development Project

[3] Carolina Abecedarian, Children's Aid Society, Howard Street Tutoring Program, Perry Preschool Project

[4] Big Brothers/Big Sisters, Career Academies, Career Beginnings, Minnesota Family Investment Program, Children's Aid Society, Reading One to One

[5] Career Academies, Job Training Partnership Act

[6] Job Training Partnership Act

[7] Career Academies

[8] Children at Risk, Minnesota Family Investment Program, New Hope Project, Ohio LEAP, Quantum Opportunities Project, YouthCorps

[9] Children at Risk, Minnesota Family Investment Program, Ohio LEAP

[10] Quantum Opportunities Project, YouthCorps

Experimental Evaluations of Social Programs that Examined Impacts on One or More Educational Outcomes and Whether They Were Found to Work, Not Proven to Work, or Had Mixed Findings (Source: http://www.childtrends.org/links)

AREAS FOR TARGETED INTERVENTION ACTIVITIES	NOT PROVEN TO WORK	MIXED REVIEWS	FOUND TO WORK

Increasing Academic Self-Concept	- **21st Century Community Learning Centers** (after-school program)
	 - **Early Risers** (summer program and after-school program)
		- **Project RAISE** (multi-component mentoring program, did not measure academic self-concept)	- **Howard Street Tutoring** (an after-school tutoring program)
			 - **Job Opportunities and Basic Skills Training Program** (services to enhance job skills and opportunity for parents on welfare)
			
			 - Programs providing adult guidance:
			    - **Big Brothers/Big Sisters**
			    - **Project BELONG**
			    - **Quantum Opportunities Program**
			 - Programs providing comprehensive services:
			    - **Children's Aid Society**
			    - **Fast Track**
			    - **High/Scope Perry Preschool Project**

Achievement Motivation			

School Engagement	-**SAFEChildren** (educational enhancement programs for at-risk youth)
	 -**21st Century Community Learning Centers** (after-school program targeting delinquent behavior, parental involvement)
	 -**Teen Outreach Program** (teen childbearing program promoting positive achievement motivation for at-risk youth)
		-**Project RAISE** (mentoring program, mixed results)	-**JobCorps** (school-to-work programs)
			 -**Career Academies** (smaller learning communities)
			 -Educational enhancement programs for at-risk youth:
			    -**Across Ages**
			    -**First Steps to Success**
			 -Programs providing adult guidance:
			    -**Project BELONG**
			    -**Woodrock Youth Development Project**
			 -Programs targeting delinquent behaviors
			    -**Early Risers** (promoting authoritative parenting styles)
			    -**Montreal Prevention Experiment**
			    -**Project RAISE** (mentoring program, mixed results)
			 -Programs encouraging adolescents' enrollment in an academic track at school:
			    -**Ohio LEAP** (academic achievement programs)
			    -**Raising Healthy Children**

AREAS FOR TARGETED INTERVENTION ACTIVITIES	NOT PROVEN TO WORK	MIXED REVIEWS	FOUND TO WORK
Educational Expectations		-**YouthCorps** (service learning program) -**Minnesota Family Investment Program** (programs that promote increased SES of families)	-**High/Scope Perry Preschool Project** (comprehensive pre-school program) -Youth employment component: 　　-**Children's Aid Society** -Programs aimed at fostering academic and social competence among disadvantaged high school students: 　　-**Ohio LEAP** (promote enrollment in academic track at school) 　　-**Quantum Opportunities Program** -Service learning programs: 　　-**Career Academies** 　　-**Career Beginnings** 　　-**JobCorps**
Academic Achievement	-**Early Risers** (academic-orientated mentoring) -**New Chance** (academic achievement program in elementary school years)	-**Parent-Child Home Program** (high-quality early child care program, non-significant results) -**Project RAISE** (smaller class size) -Youth development programs with components of academic supports, programming: 　　-**Quantum Opportunities Program** 　　-**Summer Training and Education Program** (voucher program) 　　-**Teen Outreach Program** 　　-**Upward Bound** -Vocational programs: 　　-**Career Academies** 　　-**Ohio LEAP** (anti-poverty program) 　　-**Summer Training and Education Program** (voucher program) 　　-**Teen Outreach Program** -Service learning programs: 　　-**Career Academies** 　　-**School Choice Scholarship programs** -Academic-oriented mentoring/tutoring programs: 　　-**21st Century Learning Centers** 　　-**Children at Risk** (encourage participation in extracurricular activities, encourage parent-child	-**Home Instruction Program for Preschool Youngsters (HIPPY)** (encourage parent-child communication and parental monitoring) -**Read to Achieve Summer Literacy Day Camp** (summer camp focused on literacy) -**New Hope Project** (welfare demonstration program) -Academic-oriented mentoring/tutoring programs: 　　-**Big Brothers/Big Sisters** 　　-**Career Beginnings** 　　-**Experience Corps** 　　-**Fast Track Prevention** 　　-**Howard Street Tutoring Program** 　　-**Project BELONG** 　　-**Reading One to One** -Vocational programs: 　　-**Children's Aid Society** 　　-**JobCorps** 　　-**Job Opportunities and Basic Skills Training Program (JOBS)** 　　-**Teenage Parent Demonstration** -Service learning programs: 　　-**Career Beginnings** 　　-**JobStart** -High-quality early child care programs: 　　-**Carolina Abecedarian** 　　-**Early Training Project** 　　-**High/Scope Perry Preschool Project**

AREAS FOR TARGETED INTERVENTION ACTIVITIES	NOT PROVEN TO WORK	MIXED REVIEWS	FOUND TO WORK
		communication and parental monitoring) -**Upward Bound**	

High School Completion/ Reduce High School Dropout	-**Summer Training and Education Program**	-Youth development programs with academic supports, as well as social and health promotion:
		    -**Upward Bound** (encourage students to have high social psychological well-being self-esteem, perceived academic ability, educational aspirations)
		-Vocational programs:
		    -**Job Training Partnership Act**
		    -**Ohio LEAP** (anti-poverty program, encourage enrollment in academic track)
		-High-quality early child care programs
		    -**Carolina Abecedarian**
		    -**Early Training Project**
		    -**High/Scope Perry Preschool Project**
		    -**Parent-Child Home Program** (just below significance)
		-Academic-oriented mentoring/tutoring programs:
		    -**Quantum Opportunities Program** (early fertility/parenthood prevention, behavior/aggressive behavior modification program)
			-**New Chance** (academic achievement program)
			- **Mississippi DOC Project Aware** (Non-confrontational/non-scare-tactic prisoner-run programs for juvenile delinquents)
			
			-Academic-oriented programs with a mentoring/tutoring component:
			    -**Job Start** (discourage drug use during adolescence, enforce state policies on later age of legal school drop out)
			-Vocational programs:
			    -**Career Beginnings** (high school completion program)
			    -**Job Corps**
			    -**Teen Outreach Program** (discourage drug use during adolescence, problem behavior modification, academic supports, social health promotion, early fertility program)

AREAS FOR TARGETED INTERVENTION ACTIVITIES	NOT PROVEN TO WORK	MIXED REVIEWS	FOUND TO WORK
Postsecondary Attendance and Attainment	-Vocational programs: 　-**Job Corps** 　-**Summer Training and Education Program** (on some measures)	-**Youth Corps** (vocational program) -**Children at Risk** (participation in extracurricular activities during high school) -Youth development mentoring/tutoring programs with incorporated academic supports, programming, mentoring program: 　-**Quantum Opportunities Program** 　-**Upward Bound** (encourage adolescents to take classes in the academic and college prep tracks) - High-quality early child care programs: 　-**Carolina Abecedarian** 　-**Early Training Project** -Early fertility/parenthood-prevention programs: 　-**Summer Training and Education Program** (on some measures)	-**Career Beginnings** (encourage adolescents' educational aspirations during secondary school through mentoring and vocational activities) -**New Chance** (academic achievement program)