



Virtual Meeting

Workforce “Soft Skills” and the Connection to Social, Emotional, and Academic Development in K-12

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Presenters

- Dr. Deborah Moroney, American Institutes for Research
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- Dr. Tim Kautz, Researcher, Mathematica Policy Research;
Member, Council of Distinguished Scientists
- Eric Spiegel, Immediate Past President and CEO of Siemens USA
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Pathways to Success

The connection between social and emotional development and being future ready

Deborah Moroney, PhD
Director and Principal Researcher

American Institutes for Research

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What makes you successful?



So many factors...



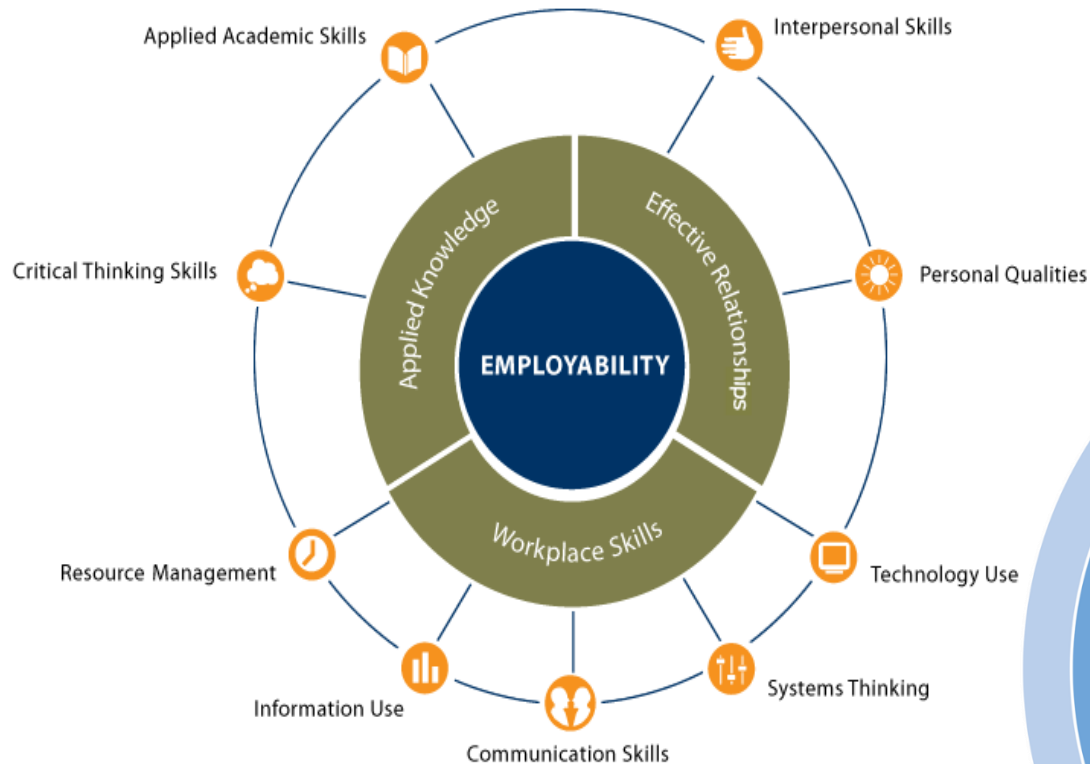
Emotional Intelligence



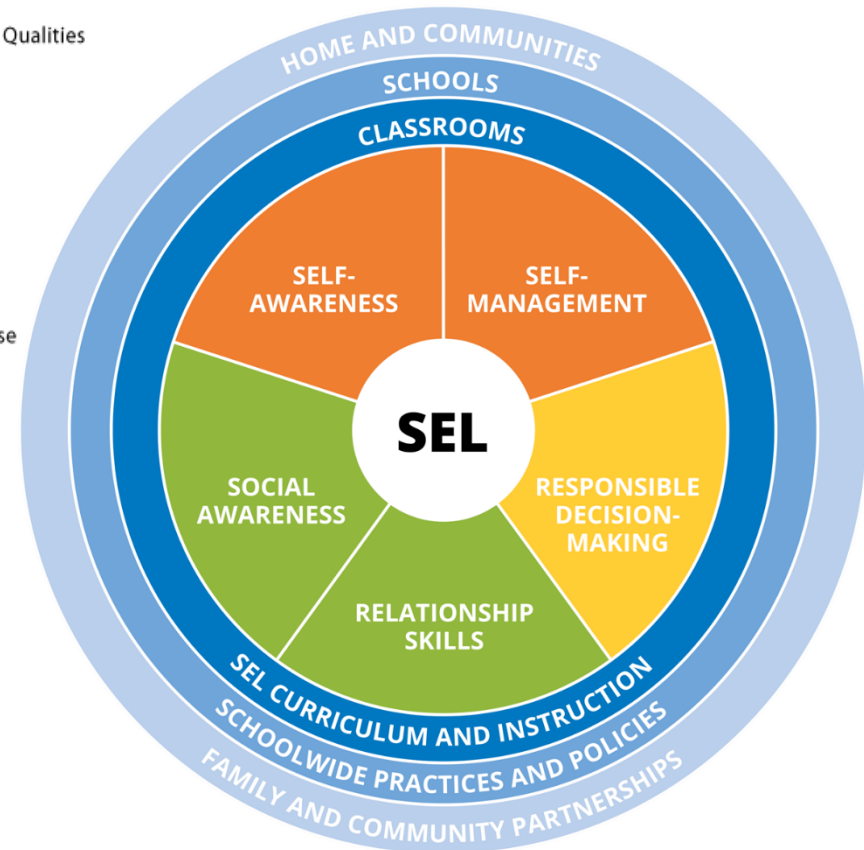
Beliefs About Ourselves



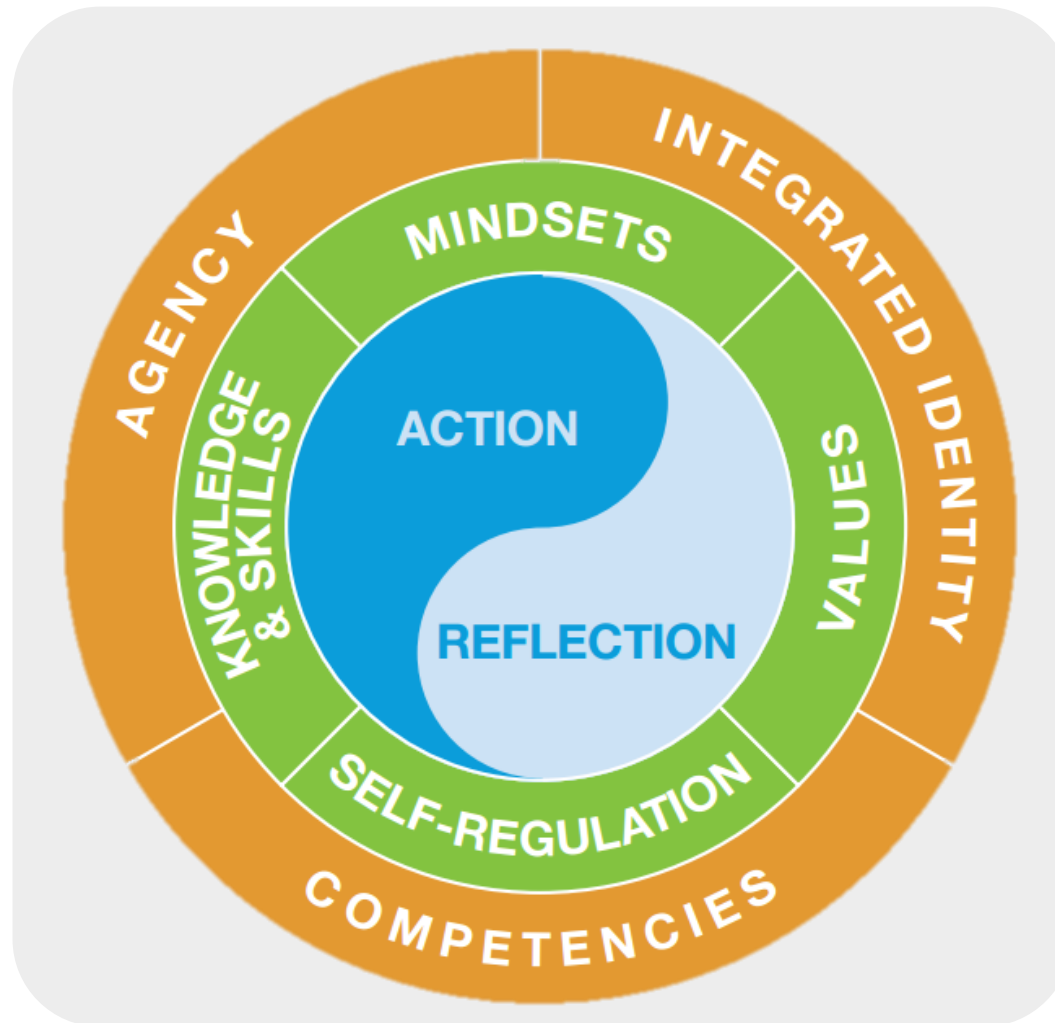
Social and Emotional Skills



Employability Skills



Foundations for Young Adult Success: A Developmental Framework



Practices that support SEAD in K-12 and Afterschool



Group-work
Inquiry based learning
Hands on and Experiential Learning
Exploration
Explicit Strategies
Reflection

Apprenticeships
Peer to peer learning
Leadership programs
Service Learning
STEM and SEL programming



The compass and the guide



What does the future hold?

- Imagination
- Exploration
- Entrepreneurship



Social and emotional development is vital for success in the labor market

Tim Kautz
Mathematica Policy Research

Aspen Institute
February 15, 2017
This draft, February 12, 2017

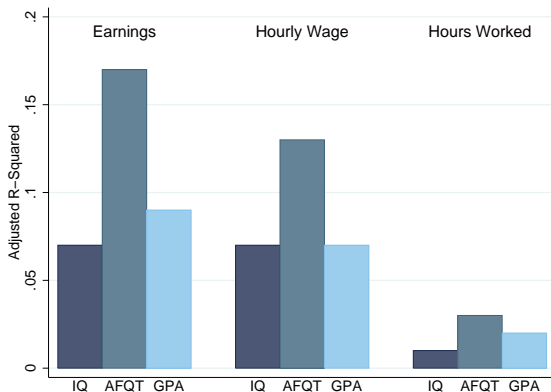
“Arithmetic, grammar, and the other rudiments, as they are called, comprise but a small part of the teachings in a school. The rudiments of feeling are taught not less than the rudiments of thinking. The sentiments and passions get more lessons than the intellect.” -Mann (1867, p. 420)

- ① Achievement tests miss important determinants of success
- ② Social and emotional skills are as important as achievement
- ③ Social and emotional skills can be learned

1. Achievement tests miss important determinants of success

Figure 1: Fraction of success explained by IQ and achievement measures

(a) Males

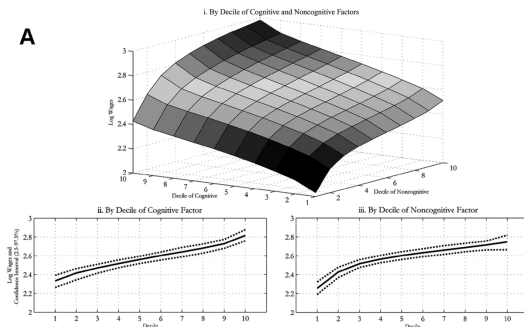


Source: Heckman and Kautz (2012) using the National Longitudinal Survey of Youth (NLSY79)

2. Social and emotional skills are just as important as achievement

- 1 The Secretary's Commission on Achieving Necessary Skills (SCANS) highlighted that foundational skills for employment include reading and arithmetic (etc.), but also individual responsibility, self-esteem and self-management, sociability, and integrity
- 2 69% of employers rejected hourly applicants because they lacked basic employability skills, e.g., showing up every day, coming to work on time, and having a strong work ethic (Barton, 2006)
- 3 32% rejected applicants due to inadequate reading and writing skills

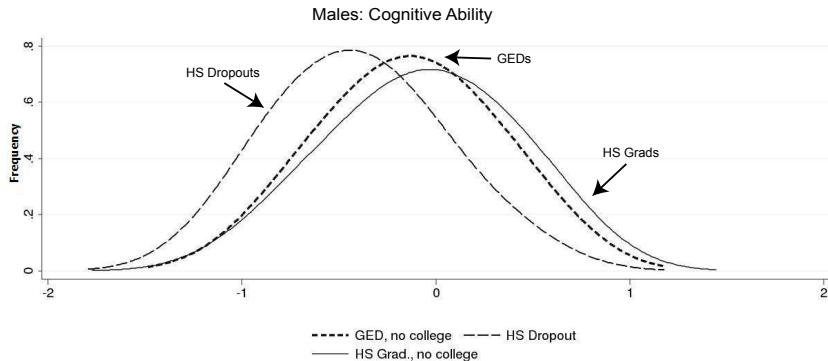
Figure 2: Importance of cognitive skills and social and emotional skills in the labor market



Source: Heckman, Stixrud, and Urzúa (2006) using the National Longitudinal Survey of Youth (NLSY79)

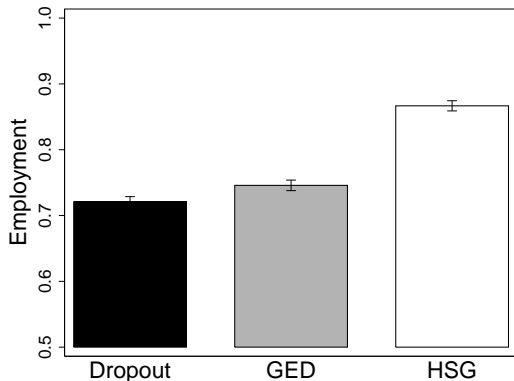
- GED is an achievement test that secondary school dropouts can take to certify that they are the equivalents of secondary school graduates
- 12% of all secondary school certificates are GEDs
- Are GED recipients really equivalent to secondary school graduates?
- Draw on evidence from Heckman, Humphries, and Kautz (2014)

GED recipients are as smart as high school graduates



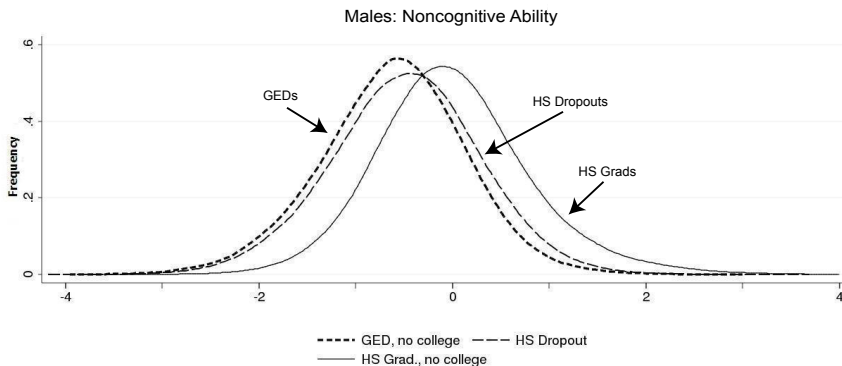
Source: Heckman, Humphries, and Kautz (2014), National Longitudinal Survey of Youth, 1979. *Notes:* The distributions represent cognitive factors, estimated using a subset of the Armed Services Vocational Aptitude Battery (ASVAB). The factors are adjusted for educational attainment, as laid out in Hansen, Heckman, and Mullen (2004). The sample is restricted to the cross-sectional subsample for both males and females. Distributions show only those with no postsecondary educational attainment. The cognitive factors are normalized by gender to be mean zero, standard deviation one.

Figure 3: Employment rates for high school dropouts, GED recipients, and high school graduates



Source: Heckman, Humphries, and Kautz (2014), American Community Survey.

The GED test does not capture social and emotional skills



Source: Heckman, Humphries, and Kautz (2014), National Longitudinal Survey of Youth, 1979. *Notes:* The distributions represent cognitive factors, estimated using a subset of the Armed Services Vocational Aptitude Battery (ASVAB). The factors are adjusted for educational attainment, as laid out in Hansen, Heckman, and Mullen (2004). The sample is restricted to the cross-sectional subsample for both males and females. Distributions show only those with no postsecondary educational attainment. The cognitive factors are normalized by gender to be mean zero, standard deviation one.

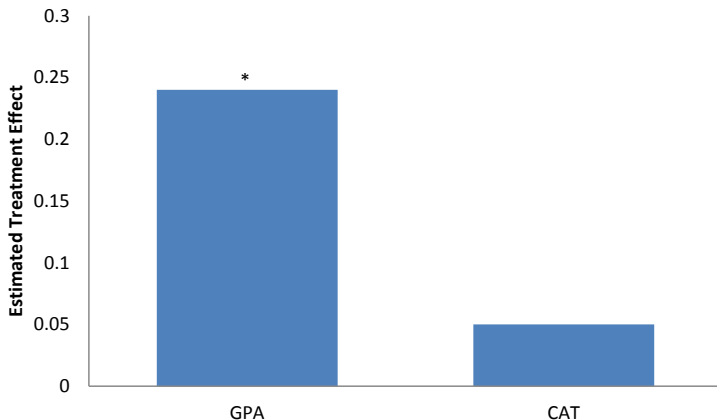
3. Social and emotional skills can be learned

Many social programs have been successful by developing social and emotional skills

- Review over 30 well-evaluated programs (Kautz, Heckman, Diris, ter Weel, and Borghans, 2014)
- Only programs that started before age 3 had a long-term effect on IQ
- Many programs starting after age 3 have effectively improved outcomes by improving social and emotional skills
- Adolescent programs that teach social and emotional skills in the workplace (or specific context) are promising

- Targeted public elementary schools in high-crime areas of Seattle
- Lasted from first grade through sixth grade
- Involved both teacher and parent training, emphasizing an attachment relationship
- Included lessons on conflict resolution, cooperative learning

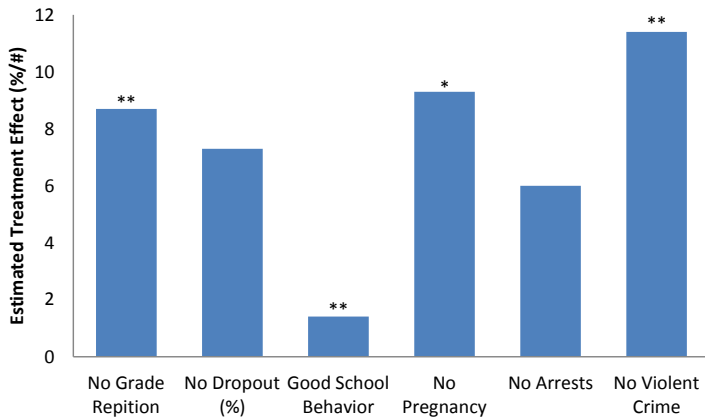
Figure 4: The Effect of SSDP on GPA and CAT (Age 18)



* 10% significance; ** 5% significance; *** 1% significance

Source: Estimates from Hawkins, Catalano, Kosterman, Abbott, and Hill (1999).

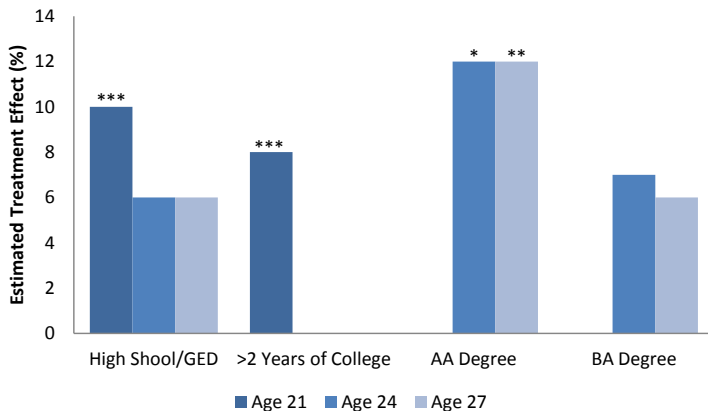
Figure 5: The Effect of SSDP on Age-18 Behaviors



* 10% significance; ** 5% significance; *** 1% significance

Source: Estimates from Hawkins, Catalano, Kosterman, Abbott, and Hill (1999).

Figure 6: The Effect of SSDP on Educational Attainment



* 10% significance; ** 5% significance; *** 1% significance

Source: Estimates from Hawkins, Kosterman, Catalano, Hill, and Abbott (2005, 2008).

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