

Behavioral Economics of Education: Progress and Possibilities

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"The roots of education are bitter, but the fruit is sweet" - Aristotle (384BC - 322BC)

With investment model of human capital, all individuals perfectly understand the trade-offs

Yet clearly this does not apply to a six-year old, who must be persuaded that school is fun now or given no better option



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Time Preference changes with age

(e.g. Giedd et al., 2012, Steinberg et al. 2009, Green et al. 1994)

- remarkable process of neural circuitry expansion and pruning
- nerve cell conductivity also improves
- brain's ability to think about the future takes 25 years to mature
- gap between development of immediate pleasure system and forward looking system largest during adolescence

Even adults often not time-consistent

future gains are discounted more than future losses

(Stanovich et al., 2012)

small changes to outcomes disc. more than large changes

(Frederick et al., 2002)

small probability events, when emphasized, discounted less

(Rick and Loewenstein, 2008)

responses depend on context, emotional state, social identity

(Benjamin, Choi and Strickland, 2010, Galvan, 2012)

sometimes don't even think about long-term, relying instead on routine, rules of thumb or past habits

(Stanovich et al., 2012)

What is behavioral economics?

integrates research from psychology, neuroscience, and sociology to better understand individual decision making and develop policies that address shortcomings in our decision making process

Does not imply wholesale rejection of neoclassical economics, but rather provides theories for why sometimes individuals make decisions that are not in their best long-term interests

Active applications to savings, finance, health, less so for education but that's changing

Outline of today's talk

- general framework for why youth may not take full advantage of education opportunities
- particular education outcomes worth encouraging
- recent applications
- prospects and possibilities for further progress

Two broad systems for cognitive thinking:

System 1: (intuitive, impressionistic)

fast

automatic

effortless

associative

difficult to control

System 2: (deliberate, explicit)

slower

effortful

controlled

With overreliance on system 1 thinking for long-term decisions:

students often:

- focus too much on the present
- rely too much on routine
- focus too much on negative identities

mistakes often more frequent under greater stress, more uncertainty, and more choice

Adolescents' system 2 is immature while system for pleasure seeking well-developed

Some students focus too much on the present

many education decisions involve uncertain, incremental long term benefits (e.g. homework, practice, attendance vs games, videos, friends)

children and adolescents especially prone to short-term thinking (Bettinger and Slonim)

present bias leads to sub-optimal behavior comparing to more actively using system 2

education itself may improve integration of system 2 into long-term decision making

Some students rely too much on routine

relying on rules of thumb, routine, and structure help free up bandwidth for more complicated tasks

opportunities for welfare improvement may exist but require deliberate disruption to routine (must use System 2 to take action towards new routine)

e.g. transition from Gr.11 to 12 versus Gr.12 to college

information to help optimize may be readily available but students must access it to take advantage of it - must deliberately seek it out

e.g. selective college applications: Hoxby and Avery (2013)

Some students focus too much on negative identities

Concerns about social identity predominate adolescent thinking

social identity issues exacerbates present-bias, as does projection bias that identity concerns will continue

identities may also relate to attitudes (I am 'resilient', 'capable', 'unworthy', 'average')

attitudes can be made manipulated, which in turn affects education outcomes (Dweck and Legget, 1988)

Evidence of overreliance of System 1?

money on the sidewalk left behind (e.g. grant aid)

nudges work (interventions that encourage certain outcomes but which do not meaningfully alter costs or restrict choice)

stated desire to change behavior without action

regret

High returns?

high school completion (e.g. Angrist and Krueger, 1991)

college attainment (Zimmerman, 2014, Cadena & Keys)

program/college match (Hoxby and Avery, 2013)

homework (Grodner and Rubb, 2013)

classroom attendance (Dobkin et al. 2010)

better understanding of college aid/costs

parental investments

Examples to help overcome behavioral barriers

- 1) encourage youth to be more forward looking
- 2) offset immediate costs with immediate benefits
- 3) provide reminders or help to change routine
- 4) change environment to change routine
- 5) strengthen positive identities
- 6) simplify

1) encourage youth to be more forward looking

Morisano et al. (2010) undergrads at McGill with GPAs below 3.0 randomly given online goal-oriented exercises: e.g. close your eyes and imagine your ideal future, write about it for 15 minutes not concerned with grammar or spelling. What things do you imagine doing to meet your goals 5 years from now, 1 year from now?

Goal is to help students clearly define and articulate goals, giving more meaning and purpose to current activities

2.5 hour intervention

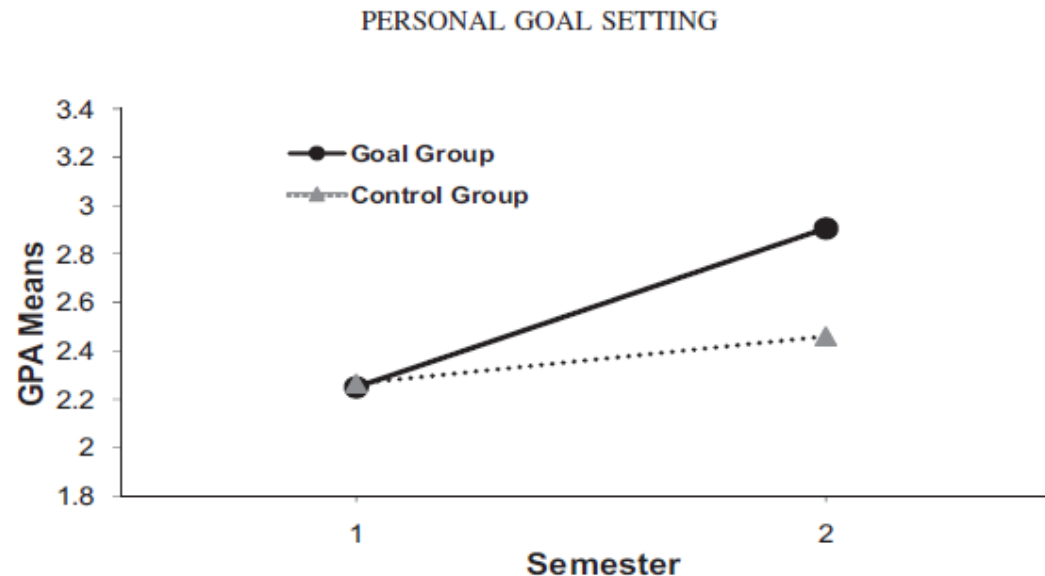


Figure 1. Group differences in grade-point average (GPA) change postintervention.

2) offset immediate costs with immediate benefits

significant latitude in design (school, targets, amounts, subject, type of incentive etc...)

generally modest or non-existent effects with test score incentives, but at least not negative (Fryer 2011, Angrist, Oreopoulos, and Williams, 2014)

small but significant effects with course credit incentives (Barrow et al. 2014, MacDonald et al. 2009)

incentivize inputs? (Fryer, 2011)

non-monetary incentives? (Springer et al. 2014)

early incentives? (Angrist et al., 2014, Ford, 2014)

Table 1: Interventions that aim to offset immediate costs with immediate benefits

Authors	Treatment	Data	Findings
<i>Panel A: Primary, middle or high schools</i>			
Fryer Jr. (2011)	(i) \$2 payment for each book read in Dallas public schools (Earning by Learning); (ii) payment for performance on a series of tests in NYC public schools (NYC Spark); (iii) payment for grades in 5 core courses in Chicago (Paper Project)	Administrative data from 203 public schools in Chicago, Dallas and New York City	(i) Earning by Learning: (a) .012 standard deviation increase in reading scores, (b) .079 standard deviation increase in math scores; (ii) NYC Spark: (a) -.026 to .004 standard deviation increase in reading scores, (b) -.031 to .062 standard deviation increase in math scores; (iii) Paper Project: (a) -.006 standard deviation increase in reading scores, (b) -.010 standard deviation increase in math scores. No main effect estimates above are significant.

Table 1: Interventions that aim to offset immediate costs with immediate benefits

Authors	Treatment	Data	Findings
<i>Panel A: Primary, middle or high schools</i>			
Riccio et al. (2013)	<p>Opportunity NYC: Various health, workforce, and education incentives directed at children including: (i) \$25 per month for 95% school attendance; (ii) \$300 to \$600 for passing or proficiency on standardized exams (amount varies for primary/middle/high school students); (iii) \$25 per parent-teacher conference attended (up to 2 per year)</p>	<p>Administrative and survey data for more than 11,000 children in New York</p>	<p>Students in 4th grade at random assignment: effects on math proficiency (i) 2.1 percentage points in Year 1 (not significant) (73 versus 71 percent); (ii) 1.7 percentage points in Year 2 (not significant) (80 versus 79 percent).</p> <p>Students in 7th grade at random assignment: effects on math proficiency: (i) 0.8 percentage points in Year 1 (not significant) (60 versus 59 percent); (ii) -1.6 percentage points in Year 2 (not significant) (62 versus 64 percent).</p>

Table 1: Interventions that aim to offset immediate costs with immediate benefits

Authors	Treatment	Data	Findings
<i>Panel A: Primary, middle or high schools</i>			
Springer, Rosenquist and Swain (2014)	Students who attended 25 percent and 75 percent of their allotted supplemental education services (SES) tutoring hours received (i) a signed certificate of recognition from the district superintendent; OR (ii) \$25 plus an additional \$50 upon completing 100 percent of allotted hours	Administrative data for more than 300 primary and middle school students	<p>Students randomly assigned to receive the non-monetary award (certificate) attended 43 percent more tutoring hours than control group students (60 versus 17 percent).</p> <p>Students randomly assigned to receive the monetary award attended 6 percent more tutoring hours than control group students (23 percent versus 17 percent) (not significant).</p>

Table 1: Interventions that aim to offset immediate costs with immediate benefits

Authors	Treatment	Data	Findings
<i>Panel B: Postsecondary Education</i>			
Angrist, Lang and Oreopoulos (2009)	The Student Achievement and Retention Project (STAR) (i) GPA based scholarship (SFP); (ii) mentoring from upper-year undergraduates (SSP); (iii) SFP + SSP	Administrative data for first year students at a large public Canadian university	Students randomly assigned to the SFP treatment arm (i) .01 standard deviation increase in first-year GPA (not significant); (ii) -.02 standard deviation increase in second-year GPA (not significant). Students randomly assigned to the SFP + SSP treatment arm (i) .23 standard deviation increase in first-year GPA; (ii) .08 standard deviation increase in second-year GPA (not significant).

Table 1: Interventions that aim to offset immediate costs with immediate benefits

Authors	Treatment	Data	Findings
<i>Panel B: Postsecondary Education</i>			
Angrist, Oreopoulos and Williams (2014)	\$100 reward for course grades of 70 percent + \$20 for each percentage point higher than this	Administrative data for first and second-year students at a large public Canadian university	Students randomly assigned to the treatment group (i) earned first-year GPAs .021 standard deviations higher than those for the control group (not significant); (ii) earned a second-year GPA .107 standard deviations higher than those for the control group (not significant).

Table 1: Interventions that aim to offset immediate costs with immediate benefits

Authors	Treatment	Data	Findings
<i>Panel B: Postsecondary Education</i>			
MacDonald et al. (2009)	\$750 each of three semesters for (i) obtaining a 2.0 GPA or higher; (ii) meet eligibility requirements for the following semester; (iii) completing at least 12 hours of tutorial, case management or career workshops	Administrative data for at-risk community college students in Ontario, Canada	Students randomly assigned to the treatment group earned GPAs (i) 0.07 points higher during the first semester of college (2.18 versus 2.11) (not significant); (ii) 0.12 points higher during the second semester (2.06 versus 1.88); (iii) 0.01 points higher during the third semester (2.10 versus 2.09) (not significant). Larger effects were observed for women and older students.

Table 1: Interventions that aim to offset immediate costs with immediate benefits

Authors	Treatment	Data	Findings
<i>Panel B: Postsecondary Education</i>			
Ford et al. (2012)	Future to Discover (FTD): “Learning Accounts” up to \$8,000 in funds for college related expenses	Administrative data from high schools in two Canadian provinces	Eligibility for Learning Accounts increased postsecondary enrollment by 8 percentage points and postsecondary graduation by 8 percentage points (14 versus 22 percent)

3) provide reminders or help to change routine

mailings (e.g. Hoxby and Turner, 2013)

telephone calls (Lavecchia, Liu, and Oreopoulos, 2014)

text messaging and apps (Castleman and Page, 2014, York and Loeb, 2015)

personal help (Bettinger, Long, Oreopoulos, and Sanbonmatsu, Carrell and Sacerdote, 2014, Castleman, Arnold and Wartman)

easy-access coaching/tutoring (Bettinger and Baker, 2014)

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel A: Text messages, Email reminders, Mailings, and Videos</i>			
Hoxby and Turner (2013)	Mailed semi-customized information on college options plus application fee waiver for high-achieving, low-income students	Administrative data from 12,000 high school seniors in the US	[Treated students (i) applied to 2.2 more colleges (6.9 versus 4.7 schools); (ii) 40 percentage points more likely to apply to a selective college (92 versus 52 percent); (iii) 5 percentage points more likely to enroll in a selective school (8.8 versus 3.5 percent).

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel A: Text messages, Email reminders, Mailings, and Videos</i>			
Castleman and Page (2014b)	12 text message reminders about re-filing the FAFSA to renew financial aid after the freshman year	Administrative data from the National Student Clearinghouse and <u>uAspire</u> (a non-profit organization) for 808 college students in Boston and Springfield, Massachusetts	Community college students randomly assigned to receive text message reminders were 12 percentage points (19 percent) more likely to persist into their sophomore year (baseline persistence rate of 64 percent). The intervention had no effect on 4-year college students (baseline persistence rate of 87 percent).

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel A: Text messages, Email reminders, Mailings, and Videos</i>			
Castleman and Page (2014c)	Text message reminders and mentoring support to complete college enrollment process	Administrative data from Texas, Massachusetts and Pennsylvania	Students randomly assigned to receive text message reminders were 3 percentage points more likely to enroll in a two year college (23 versus 20 percent). Treatment effects were largest for students with moderate high school GPAs and less defined college plans

Table 3: Interventions to Help Reduce Inertia and Change Routine for Parents

Authors	Intervention	Data	Findings
Bergman (2013)	Biweekly calls/texts/emails to middle and high school parents about missed assignments and tests	Administrative data from 462 students in grades 6-11 at a school in Los Angeles	<p>Students whose parents were eligible for treatment experienced (i) a .23 standard deviation increase in GPA, sensitive to past GPA as a control; (ii) marginal increase in test scores; (iii) improvement in classroom behavior (iv) 6 percentage points less likely to exhibit (teacher reported) unsatisfactory classroom behavior (20 versus 26 percent); (v) 6.9 percentage points more likely to exhibit (teacher reported) excellent classroom behavior (41 versus 34 percent).</p> <p>Treated parents were 7.9 percentage points more likely to attend parent-teacher conferences (23 versus 15 percent).</p>

Table 3: Interventions to Help Reduce Inertia and Change Routine for Parents

Authors	Intervention	Data	Findings
Kraft and Dougherty (2013)	Daily phone calls/text messages to parents of 6 th and 9 th grade students at MATCH charter school in Boston. Messages focused on what child did that day, what assignments and homework was assigned and ways for the child to improve.	Administrative data from 6 th and 9 th grade charter school students in Boston	Students of parents eligible for treatment (i) increased homework completion by 5.9 percentage points (85 versus 79 percent); (ii) increased in-class participation by 0.59 times per-day (6.84 versus 5.25 times per day).

Table 3: Interventions to Help Reduce Inertia and Change Routine for Parents

Authors	Intervention	Data	Findings
Kraft and Rogers (2014)	Weekly calls/emails/text messages to parents of high school students highlighting (i) what the student was doing well behaviorally or academically; OR (ii) what the student needed to improve on	Administrative data for 435 summer program high school students	Students of parents who received messages highlighting positive behavior were 4.5 percentage points more likely to earn course credit (91.7 versus 87.2 percent) (not significant) Students of parents who received improvement messages were 8.8 percentage points more likely to earn course credit (96 versus 87.2 percent).

Example: READY4K Benjamin York and Susanna Loeb (2014)

Disadvantaged parents in Cal. signed up for study in summer 2013
treated group received 3 text messages each week for 8 months

MOndays: FACT texts, highlighting importance of particular skill

FACT: Beginning word sounds are essential for reading. You can help your child learn to read by saying the beginning sound of words. “Read” starts w/ “rrr.”

Wed. TIP text: short simple and specific activities for parents to do

TIP: Say two words to your child that start with the same sound, like happy & healthy.

Ask: can you hear the “hhh” sound in happy & healthy?

Fridays: GROWTH text: encouragement and reinforcement

GROWTH: By saying beginning word sounds, like “ttt” in taco & tomato, you’re preparing your child 4K. Now, have your child make the “ttt” sound.

Table 4

The effects of READY4K! on parental involvement (estimates reported in standard deviation units)

<i>Teachers' ratings of how often parents ask them about:</i>	Treatment effect estimates			
	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>
How the child gets along with others	0.119 (0.109)	0.224** (0.092)	0.226** (0.092)	0.192* (0.098)
What their child is doing in school	0.031 (0.107)	0.168* (0.086)	0.166* (0.089)	0.160* (0.091)
What they can do at home to help the child learn to read	-0.009 (0.096)	0.129* (0.075)	0.132* (0.074)	0.129* (0.074)
<i>N</i> =	254	254	254	254
<u>Model inclusions:</u>				
Site fixed effects		X	X	X
Imbalanced pre-treatment covariates			X	X
Additional pre-treatment covariates				X

Notes. Standard errors clustered at the teacher level. Statistical significance levels: * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

And positive effects on literacy assessment: 0.25 std

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel A: Personal Assistance</i>			
Avery (2013)	Tutoring and college application assistance	Administrative data from the College Possible Program	Students randomly assigned to the College Possible program were (i) 30 percentage points more likely to apply to a 4-year college; (ii) 44 percentage points more likely to apply to a selective institution; (iii) 15 percentage points more likely to enroll in a 4-year college.

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel A: Personal Assistance</i>			
Bettinger, Long, Oreopoulos and Sanbonmatsu (2012)	(i) Personalized advice in completing FAFSA (FAFSA Treatment Group); (ii) Personalized financial aid estimates and encouragement to complete the FAFSA on their own (Information Only Treatment Group)	Administrative data from H&R Block in Ohio and North Carolina, the Department of Education and the National Student Clearing House	Students randomly assigned to the FAFSA Treatment group were (i) 16 percentage points more likely to complete a FAFSA (56 versus 40 percent); (ii) 11 percentage points more likely to be enrolled in college and receive financial aid (41 versus 30 percent); (iii) 9.4 percentage points more likely to be enrolled full time (31 versus 22 percent); (iv) 8 percentage points more likely to be enrolled in college for 2 years (36 versus 28 percent). Students randomly assigned to the Information Only Treatment group had outcomes similar to those in the control group.

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel A: Personal Assistance</i>			
Carrell and Sacerdote (2013)	Personalized mentoring and assistance in completing financial aid and college application forms	Administrative data from New Hampshire high schools	Students randomly assigned to receive coaching were (i) 5.4 percentage points more likely to enroll in college (57.2 versus 51.8 percent); (ii) 5.6 percentage points more likely to enroll in a 4-year college (28.3 versus 22.7 percent); (iii) no more likely to enroll in a 2-year college; (iv) 13 percentage points more likely to be enrolled in college 2 years after high school (47 versus 34 percent).

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel C: Coaching and Advising</i>			
Bettinger and Baker (2014)	Coaching to improve college completion	Administrative data from 8 public and private colleges from <u>InsideTrack</u>	Students randomly assigned to <u>InsideTrack</u> were 4 percentage points more likely to complete college (35 versus 31 percent).

Table 2: Interventions to Help Reduce Inertia and Change Routine for Students

Authors	Intervention	Data	Findings
<i>Panel C: Coaching and Advising</i>			
Cook et al. (2014)	Mandatory intensive math tutoring and weekly social-cognitive skill training	Administrative data for 106 at-risk ninth and tenth grade high school students in Chicago	Students randomly assigned to receive treatment scored (i) .51 standard deviations higher on standardized math tests (TOT .65 standard deviations); (ii) earned .43 standard deviations higher math GPAs (TOT .58 standard deviations); (iii) -.06 standard deviations higher on standardized reading tests (not significant).

4) change environment to change routine

change default (Pallais, 2013)

changing environment goes beyond nudging because doing so changes constraints

e.g. mandatory attendance (Dobkin et al. 2010)

mandatory homework (Grodner et al. 2013)

more spread out assignments (Ariely et al. 2002)

More structure in college (Scriviner et al. 2013)

Table 4: Interventions to Help Reduce Inertia and Change Routine by Changing Defaults and Adding Structure

Authors	Intervention	Data	Findings
Pallais (2013)	Before 1997, college applicants were able to send 3 free ACT score reports to schools for free. After 1997, 4 free reports were allowed with additional reports costing \$6.	American Freshman Survey	<p>Before 1997, more than 70 percent of ACT takers sent exactly 3 reports. After 1997, fewer than 20 percent sent exactly 3 reports and 70 percent sent exactly 4 reports.</p> <p>After 1997 students applied to colleges with 0.35 to 0.50 points higher on the ACT.</p>

Table 4: Interventions to Help Reduce Inertia and Change Routine by Changing Defaults and Adding Structure

Authors	Intervention	Data	Findings
Dobkin, Gil and Marion (2010)	Mandatory attendance policy for students scoring below the median on the class midterm	Administrative data from three large undergraduate economics classes	(i) The mandatory attendance policy increased attendance rates by 28 percentage points; (ii) A 10 percentage point increase in attendance led to a .16 standard deviation increase in final exam scores.

Table 4: Interventions to Help Reduce Inertia and Change Routine by Changing Defaults and Adding Structure

Authors	Intervention	Data	Findings
<u>Grodner and Rupp (2013)</u>	Mandatory homework assignments worth 10 percent of the final course grade	Administrative data from an undergraduate economics class in North Carolina	3.5 to 5.7 percent increase in test scores for students assigned to the mandatory homework group

Table 4: Interventions to Help Reduce Inertia and Change Routine by Changing Defaults and Adding Structure

Authors	Intervention	Data	Findings
<u>Ariely and Wertenbroch</u> (2002)	Students allowed to choose and commit to deadlines for assignments vs. traditional firm deadlines	Administrative data from an executive-education course at MIT	(i) Students allowed to choose assignment deadlines, on average, chose to pre-commit to less-flexible, evenly spaced deadlines; (ii) Students required to submit at evenly spaced deadlines performed better on a proof-reading task than those with flexible deadlines.

Table 4: Interventions to Help Reduce Inertia and Change Routine by Changing Defaults and Adding Structure

Authors	Intervention	Data	Findings
<p><u>Scriviner and Weiss</u> (2013)</p>	<p>Comprehensive community college program intervention: mandatory full-time enrollment, mandatory block classes, "quick" graduation, financial assistance, mentoring and career counselling</p>	<p>Administrative data from 6 CUNY colleges</p>	<p>Students randomly assigned to the treatment group (i) 9.5 percentage points more likely to be enrolled in college after two years (67.8 versus 58.3 percent); (ii) accumulated 7.6 more credits by the end of the second year of college (37.9 versus 30.4 credits); (iii) 5.7 percentage points more likely to complete their associate's degree after two years (14.5 versus 8.7 percent)</p>

5) strengthen positive identities

the need to feel liked a powerful influence on behavior

mitigate negative social influences by helping students focus on more positive identities (Cohen et al. , 2006)

help students view success based more on effort than innate ability (Dweck, 2007), Wilson and Lindville, 1982, Blackwell et al. 2007)

Table 5: Interventions that strengthen positive identities

Authors	Intervention	Data	Findings
Blackwell, <u>Trzeniewski</u> and <u>Dweck</u> (2007) (Study 2)	8 sessions over 8 weeks teaching students that the brain is malleable and that intelligence grows with effort	Administrative data from 91 7 th grade students in New York City	.55 standard deviation GPA increase from the spring of 7 th grade to the spring of 6 th grade for students randomly assigned to receive the treatment, relative to the control group.

Table 5: Interventions that strengthen positive identities

Authors	Intervention	Data	Findings
Cohen, Garcia, <u>Apfel</u> and Master (2006)	Targeted reaffirmations of personal adequacy and self-integrity	Administrative data from a seventh grade school	Students randomly assigned to the treatment group earned a fall semester GPA 0.3 points higher than the control group (on a 4 point scale). Treatment effects were largest for African American students; those for white students were small and insignificant.

Table 5: Interventions that strengthen positive identities

Authors	Intervention	Data	Findings
O'Rourke et al. (2014)	An educational game that emphasized that intelligence is malleable. Children are awarded points for effort, persistence and strategy.	Administrative data on performance in the educational game Refraction for more than 15000 children	Children randomly assigned to experimental condition (which emphasized that intelligence is malleable) (i) persisted in the game for 29 more seconds (median 118 versus 89 seconds); (ii) completed 1.2 more levels of the game, on average (6.7 versus 5.5 levels).

Table 5: Interventions that strengthen positive identities

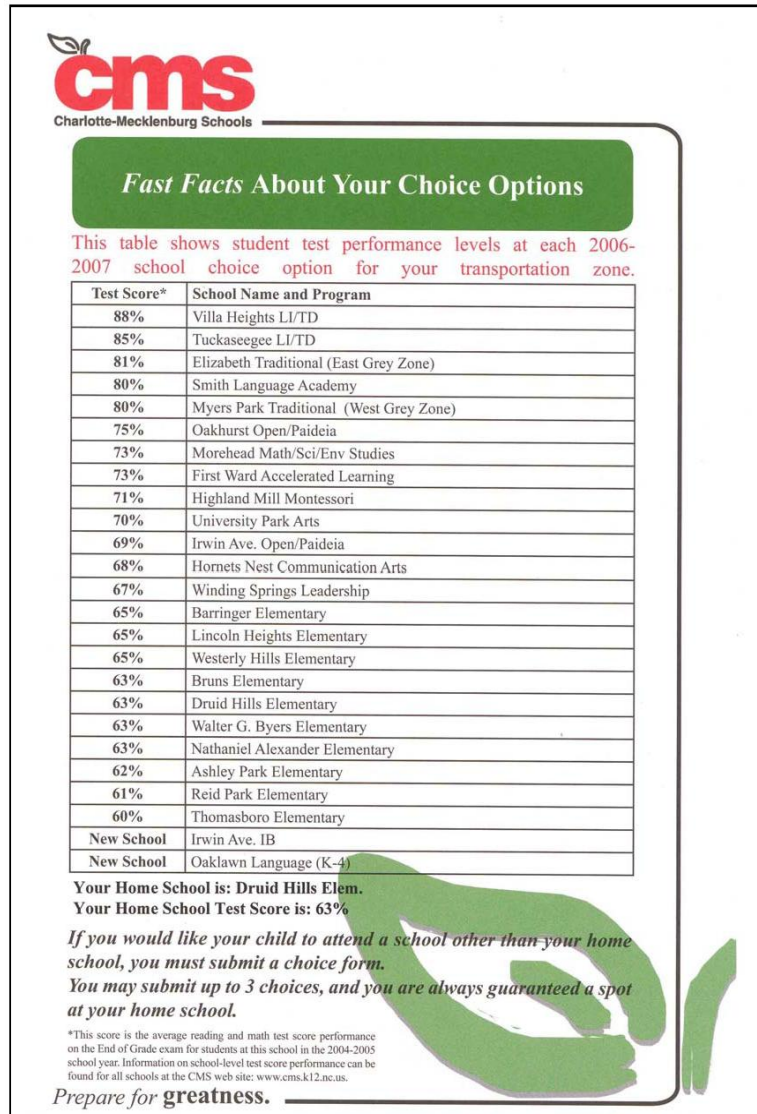
Authors	Intervention	Data	Findings
Wilson and Lindville (1982)	Students were shown booklets and videos of upperclassmen who described that struggles during freshman year were temporary and that academic performance would likely improve in subsequent years.	Administrative data for 40 freshmen students at Duke University	Students randomly assigned to the treatment group (i) were 20 percentage points (80 percent) less likely to drop out of college by the end of their sophomore year; (ii) experienced a 0.34 GPA increase (2.92 versus 2.58 GPA). Students in the control group experienced no GPA increase (2.82 versus 2.87 GPA).

6) simplify

Parents offered school choice and sent 100 page booklet on description of schools, with website on each school

Hasings and Weinstein (2008) randomly sent 'summary' sheet as part of mailing

School choice and test scores increased



cms
Charlotte-Mecklenburg Schools

Fast Facts About Your Choice Options

This table shows student test performance levels at each 2006-2007 school choice option for your transportation zone.

Test Score*	School Name and Program
88%	Villa Heights LI/TD
85%	Tuckaseegee LI/TD
81%	Elizabeth Traditional (East Grey Zone)
80%	Smith Language Academy
80%	Myers Park Traditional (West Grey Zone)
75%	Oakhurst Open/Paideia
73%	Morehead Math/Sci/Env Studies
73%	First Ward Accelerated Learning
71%	Highland Mill Montessori
70%	University Park Arts
69%	Irwin Ave. Open/Paideia
68%	Hornets Nest Communication Arts
67%	Winding Springs Leadership
65%	Barringer Elementary
65%	Lincoln Heights Elementary
65%	Westerly Hills Elementary
63%	Bruns Elementary
63%	Druid Hills Elementary
63%	Walter G. Byers Elementary
63%	Nathaniel Alexander Elementary
62%	Ashley Park Elementary
61%	Reid Park Elementary
60%	Thomasboro Elementary
New School	Irwin Ave. IB
New School	Oaklawn Language (K-4)

Your Home School is: Druid Hills Elem.
Your Home School Test Score is: 63%

If you would like your child to attend a school other than your home school, you must submit a choice form.
You may submit up to 3 choices, and you are always guaranteed a spot at your home school.

*This score is the average reading and math test score performance on the End of Grade exam for students at this school in the 2004-2005 school year. Information on school-level test score performance can be found for all schools at the CMS web site: www.cms.k12.nc.us.

Prepare for **greatness.**

Conclusions

many behavioral barriers in education

children and youth especially susceptible to present-bias, overreliance of routine, and social influences

opportunities to address barriers are context specific

details matter

distinction between high-touch, low-touch

promising results so far, with lots of room for further research



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