

MAPPING CRITICAL STUDENT DECISIONS THROUGH COLLEGE

Reviewing the Literature and the Landscape through a Behavioral Lens

June 2016

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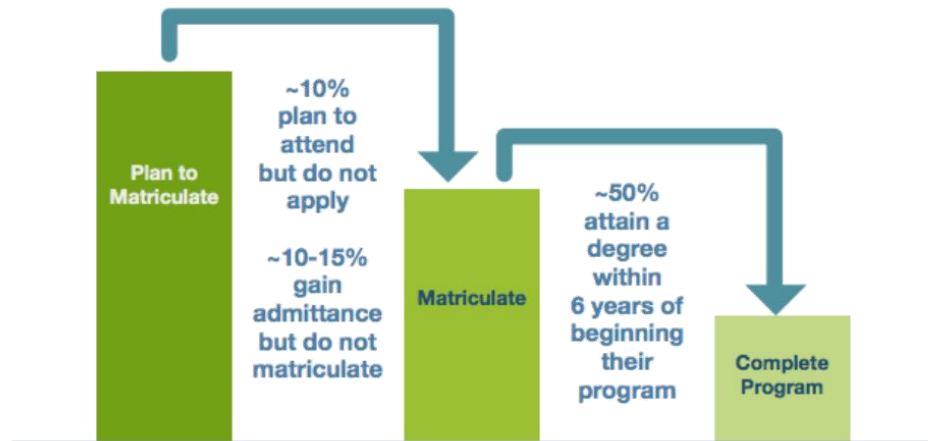
IMPETUS FOR THIS RESEARCH: GRADUATING FROM COLLEGE MATTERS...

- College graduates earn more than their high-school-educated peers
 - Median earnings of college graduate are 65% higher than high school graduate¹
 - 69% of college-degree holders earn more than \$35,000 (the “living wage cut-off” for a family of four), while only 36% of those without a college degree do²
 - Unemployment rate of college graduates is half that of high school graduates³
- College graduates are likely to make better decisions about health, marriage, and parenting, and are more goal-oriented and patient⁴

1. The College Board, 2013. 2. Carnevale et al., 2011. 3. U.S. Bureau of Labor Statistics, http://www.bls.gov/emp/ep_table_001.htm. 4. Oreopoulos & Salvanes, 2009.

...AND GETTING THERE REQUIRES NAVIGATING A COMPLEX PROCESS

- Applying to and enrolling in college involves many steps and people drop off at each one
- Biased choices at one point in time can facilitate or hinder future success
 - Failing to consider college as a choice at all
 - Missing deadlines and drop-off
 - Choosing schools that aren't a good fit/under-matching
 - Making financially unsustainable choices



IT'S ESPECIALLY COMPLEX FOR DISADVANTAGED POPULATIONS

In this report, we'll refer to low-income, first-generation, underrepresented minority, and nontraditional students collectively as "risk" segments

- College success matters even more for disadvantaged populations
 - Only 8.3% of students from low income families have earned a Bachelor's degree by their mid-20s¹ (vs 31% all income levels)
 - Low-income students with a college degree are 4x as likely to move to the top income quintile as those without, and 50% more likely to move out of the bottom quintile²
 - Non-traditional students (returning to school from the workforce) experience the same net benefits on income as traditional students³
- With less guidance and fewer resources, disadvantaged students struggle to enroll and persist through college
 - **ENROLL:** Only 52% of students in bottom income quintile enroll in PSE directly after high school, compared to 82% in top income quintile⁴
 - **PERSIST:** High SES students are 11 percentage points more likely to graduate within 6 years than low SES students at public flagship colleges⁵

In this report, we'll flag when research or recommendations are particularly relevant for one of these "risk" subgroups

NONTRADITIONAL

LOW INCOME

1. Mortenson, 2009; U.S. Census Bureau, 2009. 2. Isaacs et al., 2008. 3. Pascarella & Terenzini, 2005. 4. Baum et al., 2013. 5. Bowen et al., 2009.

WE ANALYZED STUDENT DECISION-MAKING ON THE PATHWAY TO AND THROUGH COLLEGE

- **Motivating question:** what contexts lead to biased decisions and how can we de-bias those decisions so potential students make choices in their (self-defined) best interest?
- Dual focus on challenges related to **consumer information** about college as well as **financial capability**
- Analysis in each section covers three distinct phases:
 - (1) Before the college application process
 - (2) During the college application process
 - (3) In college

METHODOLOGY

4 MAJOR COMPONENTS

A

PRIMARY + SECONDARY RESEARCH

Gather supporting evidence

B

DECISION MAP

Understand student/ family decision points and bottlenecks

C

MARKET SCAN

Assess existing CI and FC tools, products, methods, services, and providers

D

BEHAVIORAL MAPPING

Diagnose bottlenecks from behavioral perspective

POTENTIAL SOLUTIONS

METHODOLOGY

A. PRIMARY AND SECONDARY RESEARCH

- Literature review of more than 250 papers and articles
- Interviews with:
 - Students (n=19)
 - 11 low-income traditional, 5 traditional college students, 3 community college students (2 nontraditional)
 - Parents (n=5)
 - All low-income; 2 nontraditional students
 - Experts (n=16)
 - CBO and nonprofit leaders, financial aid administrators, high school administrators, academics, and student association leaders
 - Live services organizations (n=10)
 - Financial capability nonprofits and services, college planning and financing CBOs, near-peer advising nonprofits

Note: see full references in Appendix A

METHODOLOGY

B. DECISION MAP

Created a decision map charting the key decision points on the pathway into and through college from the student perspective. Informed by:

- Insights from primary and secondary research
- Behavioral bottlenecks and contextual features identified in behavioral mapping

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

METHODOLOGY

B. DECISION MAP: PRIORITIZED DECISION POINTS BASED ON THREE CRITERIA

- Where is there **evidence of a problem?**
- Where is there evidence of **effective solutions?**
- Where do we expect **behavioral bottlenecks?**

METHODOLOGY

C. MARKET SCAN GOALS

1. **Understand the current market landscape** of existing consumer information and financial literacy tools, products, methods, services, and providers
2. **Create or utilize current taxonomies** familiar to the field of types of available tools, providers, and data sources
3. **Develop rubrics for assessing tools** and providers along key dimensions (e.g. target audience, data/metrics, modality, usability, efficacy, scalability)
4. **Assess existing tools/providers**

METHODOLOGY

C. MARKET SCAN ACTIVITIES: DIGITAL SCAN

Note: details and insights in Appendix B

1. Four methods of initial scan

- i. Expert interviews, student & parent interviews, independent searches, identification of “top tool” lists

2. Filtering process and direct testing of tools by students

- i. ideas42 identified high-reach and potentially high-impact tools for direct testing
- ii. Student testers rated tool quality and categorized where they fit into decision map

3. Evaluated tool landscape within each decision to develop an understanding of the contours of the digital tool market

- i. Identified where tool market succeeds and fails at supporting student decision-making
- ii. Identified common pitfalls of tools within well-resourced decision areas
- iii. Identified where features of successful tools can be replicated at scale for maximum impact

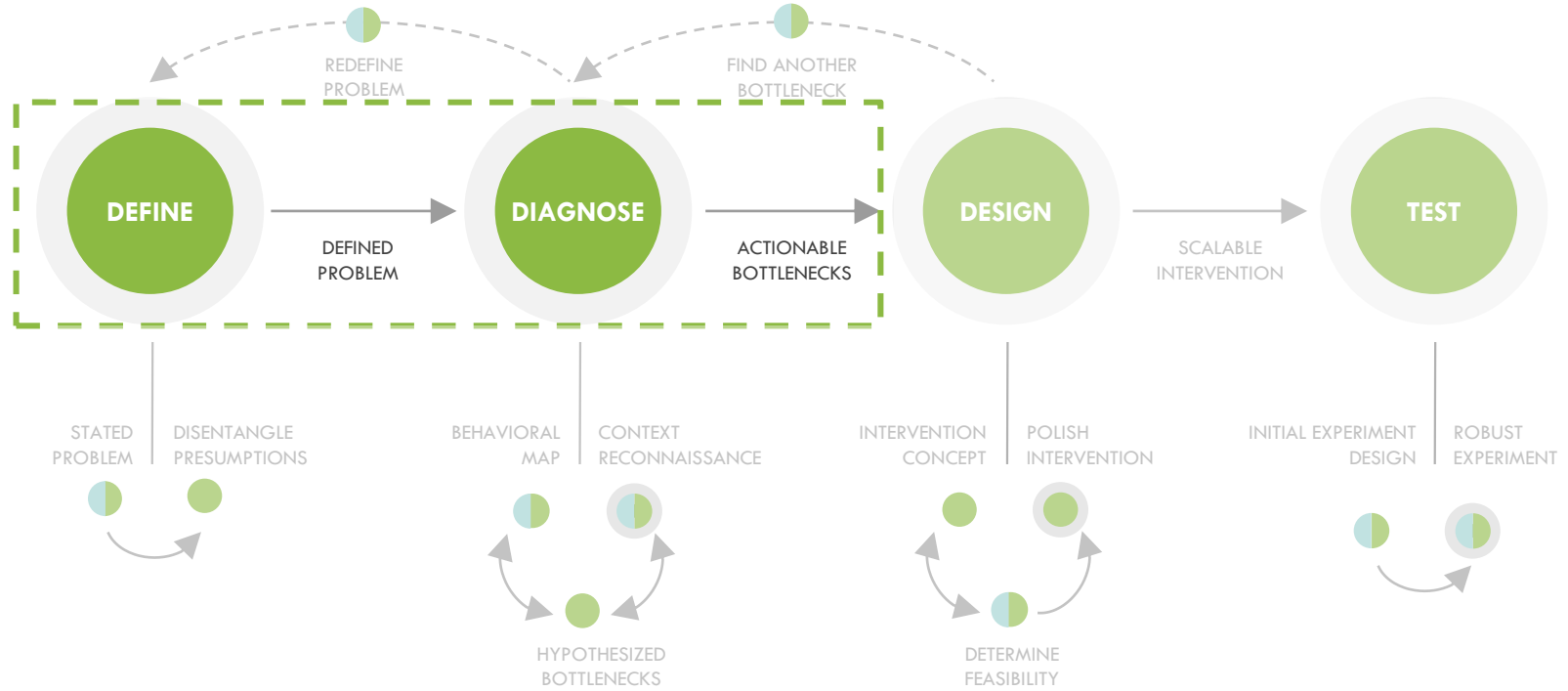
METHODOLOGY

C. MARKET SCAN ACTIVITIES: LIVE SERVICES SCAN

1. **Compiled list of live services organizations that help students apply, enroll, finance, or persist in college**
 - i. Interviews with experts
 - ii. Secondary research
2. **Interviewed 10 live services organizations to understand what elements or features are...**
 - i. ...unique or innovative
 - ii. ...most effective in driving impact for students
 - iii. ...scalable

METHODOLOGY

D. BEHAVIORAL MAPPING



CONSUMER INFORMATION RECOMMENDATIONS

CONSUMER INFORMATION: PRE-APPLICATION STAGE

During the pre-application stage, signals in students' environments about themselves and the college process can have significant influence on decisions about college.

PRE-APPLICATION DECISION POINTS

ENVIRONMENTAL SIGNALS INFLUENCE COLLEGE GOING

RELEVANT DECISIONS

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

IMPLICATIONS

students may decide
not to get a degree

students may not take
steps necessary to
apply to college

THE PROBLEM

ENVIRONMENTAL SIGNALS MAY IMPEDE COLLEGE INTENTIONS AND BEHAVIOR

- Parent education levels, encouragement, socioeconomic status, student academic ability, and availability of resources are related to students' predispositions towards postsecondary education¹
- Where school systems and policies increase academic preparedness, students are more likely to consider college²
 - Educational aspirations are related to academic preparedness and achievement³

1. Ross et al., 2012. 2. St. Johns, 2003. 3. Perna, 2006.

THE PROBLEM

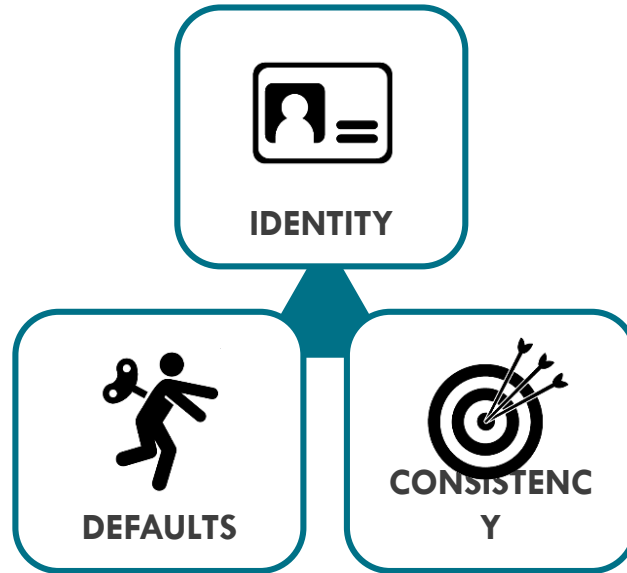
RISK SEGMENT STUDENTS HAVE PARTICULARLY NEGATIVE COLLEGE EXPECTATIONS

- While 93% of high school students aspire to attend college, less than 60% actually expect to attend¹
 - Expectations are lower among Hispanic males (44%) and American Indian/Alaskan Native males (33%)
- Low-income and first generation students are less likely to take standardized tests on their own²

1. Ross et al., 2013; Ross et al., 2012; Elliott, 2009. 2. Goodman, 2013; Klasik, 2013.

BEHAVIORAL DRIVERS

THREE FACTORS LEAD TO THE IMPACT OF ENVIRONMENTAL SIGNALS



BEHAVIORAL DRIVER: IDENTITY

HAVING A COLLEGE-GOING IDENTITY CAN INCREASE ENROLLMENT



IDENTITY

- If a student has an identity as the kind of person who goes to college, she's much more likely to figure out and execute the steps required to apply¹
- By implication, the opposite is also true: an identity as *not* the kind of person who goes to college will inhibit taking the steps necessary to apply and enroll¹

"It makes sense that **when you have a universal SAT** that some **students will be induced into finding out** they are more likely to be **college material**...That has a positive effect."

-expert interview

"You hear the pros and cons of college, and I was constantly unbalanced when I wanted to go. The turning point was when **I got a partial scholarship...for basketball**...but I ended up getting hurt...**they pulled the scholarship**...but I went with it because **I had already taken it so seriously, and I wanted to go.**"

-college student interview

1. Elliott, 2011, 2013.

BEHAVIORAL DRIVER: DEFAULTS

THE COLLEGE PROCESS IS COMPLEX AND MOST STEPS REQUIRE OPT-IN



DEFAULTS

- Across a range of contexts, people are much more likely to stick with the “default” option – from 401(k) investment decisions to organ donation¹
- Most steps in the college application process only happen if students “opt-in” to doing them, i.e. the default is not to do them
- Changing defaults lowers the barriers to college

“I had to find it [SAT prep information], they didn’t really tell us about it... if you’re an average student, **you have to look for it yourself.**”

-high school student interview

1. Johnson & Goldstein, 2004; Choi et al., 2004.

BEHAVIORAL DRIVER: CONSISTENCY

CONSISTENCY PREFERENCE HELPS STUDENTS KEEP MOVING TOWARD COLLEGE




PREFERENCE FOR CONSISTENCY

- The preference for consistency drives people to align their current actions with their identity and with past actions¹, so instilling a college identity and nudging initial steps may eventually lead to application and enrollment
- More low-income students enroll in 2- and 4-year programs when they're exposed to information and guidance around college, and when they complete specific steps in the college search and decision-making process, like visiting schools and applying for aid²

1. Festinger, 1957; Guadagno & Cialdini, 2010; Heider, 1946; 1958. 2. Plank & Jordan, 2001.

POTENTIAL SOLUTIONS

TWO APPROACHES COULD HELP SOLVE THIS PROBLEM



IDENTITY



DEFAULTS



CONSISTENCY



**DEVELOP COLLEGE
IDENTITY EARLY**

**MAKE PRE-
APPLICATION STEPS
OPT-OUT**

IDEA #1: DEVELOP COLLEGE IDENTITY EARLY

TEST AND SCALE UNIVERSAL COLLEGE SAVINGS ACCOUNT PROGRAMS

DESIGN CONCEPT

Rigorously test impact of universal College Savings Accounts on college enrollment, persistence, and graduation

- Partner with a city or state to provide **universal college savings accounts**
- **Measure the impact** on college enrollment and graduation, as well as interim metrics
 - Low-income children with <\$500 in a CSA are 3x more likely to enroll and 4x more likely to graduate than children without an account¹
- Scale program if consistently effective



1. Elliott 2011, 2013.

IDEA #2: MAKE PRE-APPLICATION STEPS OPT-OUT

SPREAD STATE POLICIES THAT REQUIRE OFFERING THE SAT DURING SCHOOL

DESIGN CONCEPT

Spread “SAT in school” policies to 50 states

Under these policies states require, or at least offer, the SAT or ACT during the school day

- Implement policies of offering the SAT or ACT during the school day in 50 states
 - Mandatory SAT testing can increase enrollment in 4-year colleges for low-income and first-generation students by 10%¹
- Optional: Expand to PSAT for sophomores

SYSTEMS
CHANGE



1. Hurwitz et al., 2014.

TRADITIONAL

FIRST GEN

LOW INCOME

CONSUMER INFORMATION APPLICATION STAGE

During the application stage, students use problematic shortcuts when deciding which schools to apply to and enroll in.

APPLICATION DECISION POINTS

SHORTCUTS OFTEN LEAD TO POOR APPLICATION/ENROLLMENT DECISIONS

RELEVANT DECISIONS

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

IMPLICATIONS

students apply to too few schools

students apply to a suboptimal mix of schools

students enroll at a suboptimal school

THE PROBLEM

STANDOUT LOW-INCOME STUDENTS USE INFERIOR APPLICATION STRATEGIES

- Many students underweight school quality indicators like graduation rate and average debt¹, while overweighting non-quality factors like distance from home (57% of students at public 4-year schools enroll within 50 miles of home²)
- Only 8% of high-achieving low-income students are “achievement typical”³, meaning they apply to at least 1 match school, at least 1 safety, and to zero non-selective schools
- 53% of high-achieving low-income students are “income typical”, applying to no good “match” school and at least one non-selective college³
- 39% of high-achieving low-income students “use strategies that an expert would probably regard as odd” ... like applying only to Harvard and a nonselective local CC³

*“Achievement-typical” students normally apply to more than 1 match school, but wasn’t a requirement for this analysis

1. Public Agenda, 2013. 2. Eagan et al, 2014. 3. Hoxby & Avery, 2013.

THE PROBLEM

RISK SEGMENTS OVERVALUE LOCATION, STICKER PRICE; UNDERVALUE QUALITY

- Low-income and minority students more affected by distance than higher income students when making college enrollment decisions¹
- Low-income families are more likely to anchor to a college's sticker price, overestimating how much college will cost to them and preemptively conclude that the college is out of their reach²
- Only 51% of adult prospective students say it's essential to know a school's average debt, and just 47% say it's essential to know graduation rate before enrolling³
- More than half of adult prospective students do not recognize the term “for-profit college”, including half of those who attended a for-profit school in the past³

“[I chose my CC] for the **location and accessibility** of it. It's three buildings, and simple. It wasn't much for me to apply there. **I could just walk there.**” -college student interview

NONTRADITIONAL

MINORITY

LOW INCOME

1. Hillman & Weichman, 2016; Kohn et al, 1976; Ovink & Kalogrides, 2015. 2. Castleman et al, 2015. 3. Public Agenda, 2013.

THE PROBLEM

MANY HIGH-ACHIEVING, LOW INCOME STUDENTS UNDERMATCH

HALF
of low-income students
undermatch¹

First-generation students
**10 percentage
points**
more likely to undermatch

1. Smith et al., 2013.

MARKET SCAN INSIGHTS

DIGITAL TOOLS FAIL TO EFFECTIVELY ADDRESS USE OF PROBLEMATIC SHORTCUTS

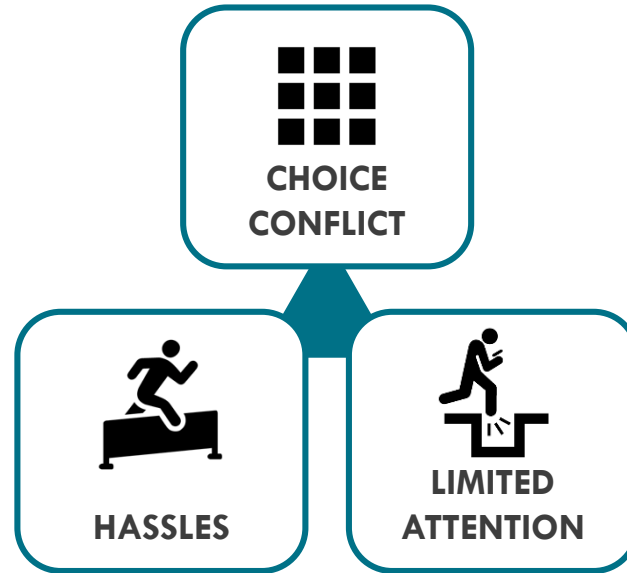
- College search tools allow students to search for colleges using a large number of characteristics like: location, program of study, and number of students
- However, most tools fail to emphasize the college characteristics that lead to student success, like academic fit, graduation rate, and default rate
- As a result, students are likely to anchor on characteristics that seem important but don't contribute to their success

MINORITY

LOW INCOME

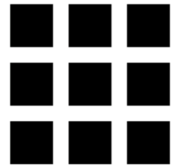
BEHAVIORAL DRIVERS

THREE FACTORS LEAD TO RELIANCE ON SHORTCUTS IN THE COLLEGE PROCESS



BEHAVIORAL DRIVER: CHOICE CONFLICT

DIFFICULT TO COMPARE COLLEGES ON KEY FACTORS



CHOICE CONFLICT

- Having many choices can hinder decision-making¹
- Students have difficulty optimizing college decisions given large choice set with many different features
- Prominence of extraneous information, like gender proportion (e.g., 52% women, 48% men), make it harder to compare schools on the most important factors

“The experience of conflict is the price one pays for the freedom to choose. Conflict arises because a person does not always know how to trade off costs against benefits, risk against value, and immediate satisfaction against future discomfort.”²

1. Schwartz, 2004. 2. Tversky & Shafir, 1992.

BEHAVIORAL DRIVER: HASSLES

HASSLES IN THE COLLEGE APPLICATION PROCESS IMPEDE STUDENT ENROLLMENT



HASSLES

- Low-income students are discouraged by the complexity of the process of applying for college admissions and financial aid, “even if they are qualified and enthusiastic about going to college”¹
 - Among qualified students in Boston public schools, only 65% of those who reported intending to go to a 4-year college at the start of their senior year actually did so¹

A big challenge for first generation students is **having enough time to complete all the steps** in the application process.

-expert interview

1. Avery & Kane, 2004.

BEHAVIORAL DRIVER: LIMITED ATTENTION

DIFFICULT TO COMPLETE ALL TASKS IN LONG, COMPLEX COLLEGE PROCESS



**LIMITED
ATTENTION**

- People have a finite capacity for attention, making it difficult to complete effortful tasks over long periods of time¹
- The process of applying to college requires many tasks in different places: test-taking through College Board; building a school list with Naviance; evaluating costs on college net price calculators, writing applications on Common App, applying for aid on FAFSA and CSS, etc.

“If tools looked difficult, that made a big difference.”
-high school student

“Biggest difference [between tools] was the amount of information presented. Don't want too much and don't want too little, few struck the right balance” -high school student

1. Kahneman, 2011.

POTENTIAL SOLUTIONS

THREE APPROACHES COULD HELP ADDRESS THE PROBLEM OF POOR SHORTCUTS



**IMPROVE COLLEGE LIST
BUILDING TOOLS**

**FLIP THE MODEL TO
OPT-OUT INSTEAD OF
OPT-IN**

**GUIDE & NUDGE KEY
APPLICATION STEPS**

IDEA #1: IMPROVE COLLEGE LIST BUILDING

WORK WITH SCALED TOOLS TO IMPROVE LIST BUILDING FUNCTIONALITY

DESIGN CONCEPT

Work with a tool that has already has some level of scale to improve the college list building functionality

- Make it extremely simple to search for good fit schools based on GPA, SAT, and location
- Prioritize by graduation rate and default rate
- Make it easy to adjust the relative weight of criteria
- Integrate a default application mix (e.g., 2 safety, 3 fit, 2 reach) and auto-assign schools into slots
- Nudge students and parents to complete a college list

IMPROVE
SCALED TOOL



IDEA #2: FLIP THE MODEL TO OPT-OUT

BUILD PLATFORM TO ENABLE INNOVATIONS LIKE COLLEGE INVITATION PROGRAM

DESIGN CONCEPT

College is currently an opt-in system. Students have to execute a long series of steps if they want to go. This creates a significant barrier for those with fewer resources and less support. Flip the model to be opt-out by building a platform that includes a database of all potential college students plus APIs that allow developers to build applications on top of it. An application could, for example, enable colleges to proactively offer admission to students, or invite them to apply.

- Create centralized database of student test scores, grades, and income level to facilitate this program
- Makes applying to good fit colleges opt-out for target students
- Supersedes the intention-action gap

SYSTEMS
CHANGE



TRADITIONAL

LOW INCOME

IDEA #3: FLIP THE MODEL TO OPT-OUT

CENTRALIZE AND AUTOMATE APPLICATION FEE WAIVERS

DESIGN CONCEPT

An application built on the platform described in Idea #2 could enable universal, paperwork-free application fee waivers for low income students. The current system of fee waivers includes various hassle factors that likely contribute to less advantaged students applying to fewer schools.

- Based on free/reduced lunch and other relevant factors where data is available
- Ideally fully automated based on a background database query by Social Security number
- Privacy concerns would be addressable

SYSTEMS
CHANGE



TRADITIONAL

LOW INCOME

IDEA #4: GUIDE & NUDGE APPLICATION STEPS

CREATE A COLLEGE APPLICATION “CONCIERGE” SERVICE

DESIGN CONCEPT

Create a mostly-digital guide through the college application process

- One portal to connect the disparate pieces involved in the process
- One step at a time
- Smart default alerts
- Timely / minimal info / action oriented
- Backstop live support element

NEW PRODUCT



IDEA #5: GUIDE & NUDGE APPLICATION STEPS

TEST AND SCALE APPLICATION NUDGE APP

DESIGN CONCEPT

Design and test impact of smartphone app that uses reminders and mindset nudges to help students through key parts of the application phase

- Combines practical deadline reminders with psychological nudges
- Could build from scratch or work with a partner with an existing prototype or beta stage product
- Could also target pre-application phase

NEW PRODUCT



TRADITIONAL

LOW INCOME

SUMMARY: CONSUMER INFORMATION RECOMMENDATIONS

Decision Points	Recommendations
<p>During the pre-application stage, signals in students' environments about themselves and the college process can have significant influence on decisions about college.</p>	<ol style="list-style-type: none"> 1. Test and scale universal college savings account programs 2. Spread state policies that require offering the SAT/ACT during school
<p>During the application stage, students use problematic shortcuts when deciding which schools to apply to and enroll in.</p>	<ol style="list-style-type: none"> 1. Work with scaled tools to improve list-building functionality 2. Build platform to enable innovations 3. Centralize and automate application fee waivers 4. Create a college application “concierge” service 5. Test and scale application nudge app

FINANCIAL CAPABILITY RECOMMENDATIONS

FINANCIAL CAPABILITY PRE-APPLICATION + APPLICATION STAGES

In the pre-application and application stages, misperceptions about college affordability (among students, parents, and even counselors) limit the schools that students consider in their choice sets.

PRE-APP AND APPLICATION DECISION POINTS

AFFORDABILITY MISPERCEPTIONS HAVE SERIOUS CONSEQUENCES

RELEVANT DECISIONS

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

IMPLICATIONS

students may
decide not to get
a degree

students may not
apply to selective
schools

students may choose
schools with lower
completion rates

THE PROBLEM

STUDENTS AND PARENTS OVERESTIMATE COSTS

students and parents
overestimate college costs
by as much as

200%¹

HALF
of prospective students
overestimate loan payments by

50%²

“There’s still a **huge lack of understanding** of what college really costs.”

-expert interview

1. TICAS, 2008. 2. New America College Decisions, 2015. 3. Public Agenda, 2013

THE PROBLEM

RISK SEGMENTS ESPECIALLY LIKELY TO OVERESTIMATE COSTS

**low-income and minority
parents**
most likely to
overestimate cost of college¹

Ability to accurately estimate costs positively and significantly **correlates with household income and educational level of parents.³**

FIRST GEN

MINORITY

LOW-INCOME

1. TICAS, 2008. 2. Public Agenda, 2013. 3. Horn et al, 2003

THE PROBLEM

AS RESULT, MANY LOW-INCOME STUDENTS DON'T APPLY TO SELECTIVE SCHOOLS

Students who over-predict net costs or report not knowing net costs at all are **significantly less likely to apply to selective colleges.**¹

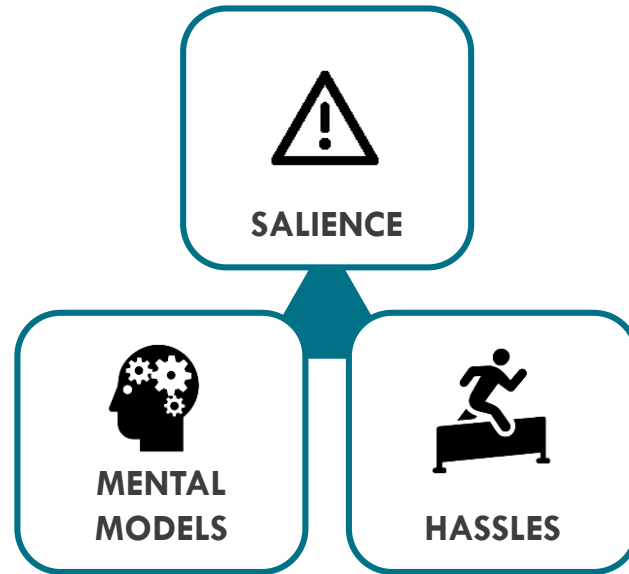
“I wish I could have had a better understanding of how to get scholarships for your first year...it's easier to know once you're in the system because you know who to talk to at the university, but before it would be better...that could have **changed where I ended up going and how much it would have cost.**”

-student interview

1. Avery & Turner, 2009

BEHAVIORAL DRIVERS

THREE PRIMARY FACTORS SHAPE PERCEPTIONS OF AFFORDABILITY



BEHAVIORAL DRIVER: SALIENCE

STUDENTS AND PARENTS FIXATE ON “STICKER PRICE” OF COLLEGE



SALIENCE

- As humans, we often focus on what is **salient** (visible, prominent, top of mind) over other factors
- Salience of high “sticker prices” for colleges may discourage some students from further exploring the actual net cost of selective colleges—or any college

MEDIA HEADLINES REINFORCE PERCEPTION OF HIGH COSTS

TheUpshot

DEGREES OF DEBT

Student Debt Is Worse Than You Think ²

THE BLOG

It's Too Expensive to Go to College Anymore ¹

SundayReview | OPINION

The Real Reason College Tuition Costs So Much ²

Low income parents “**scared off**” more easily than higher income parents by sticker price.

-expert interview

only 1/3
of students actually pay the
“sticker price”³

1. Huffington Post. 2. New York Times. 3. College Board, 2015

BEHAVIORAL DRIVER: MENTAL MODELS

PRE-EXISTING MENTAL MODELS SHAPE COLLEGE CHOICE SETS



MENTAL MODELS

selective = expensive
affordable = what parents can afford
loans = bad

- We know that our pre-existing assumptions about how the world works, or **mental models**, influence the process of reasoning through a decision¹
 - Mental models can predict and explain behavior, even if they are inaccurate²
- Interviews suggest that students may be equating price with quality, assuming that their parents must cover the full cost of college, and avoiding debt completely

“Private schools are really expensive.”
 -student interview

“I’m not even going to apply to the Ivy League, they’re too expensive.”
 -student interview

“All I know is [**loans are**] **not something that you want.**”
 -college student interview

“I always thought as a kid, your parents paid for college.”
 -student interview

1. Johnson-Laird, 2009; 2. Gentner & Stevens (1983)

BEHAVIORAL DRIVER: HASSLES

HASSLES PREVENT STUDENTS FROM ACCESSING PERSONALIZED INFORMATION



HASSLES

- Students could benefit from more **personalized information**: Customized information about application process, net costs, and paperwork-free fee waivers increased enrollment of high-achieving low-income students in selective* schools¹
 - Increased number of applications by 19% and the likelihood of match by 41%
- However, we know that even small **hassles** within a process can keep us from following-through – and calculating net price of college is actually quite complex²
 - Net Price Calculators often buried on school websites, not prominent on the main financial aid page
 - Number of questions varies from 8-70

Only 10% of prospective students report using NPCs³

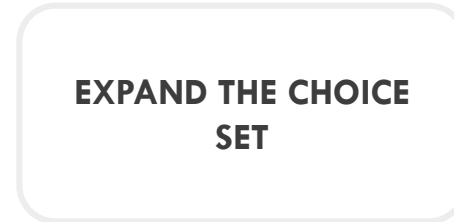
“It wasn’t so cut and dry finding each university’s tuition rates.”
-college student interview

*selective = schools with better academic records, graduation rates, and more resources

1. Hoxby & Turner, 2013. 2. TICAS, 2012. 3. New America College Decisions Survey, 2015.

POTENTIAL SOLUTIONS

THREE TYPES OF SOLUTIONS COULD HELP ADDRESS THIS PROBLEM



IDEAS #1+2: CORRECT THE MISPERCEPTION

REDESIGN TOOLS AND CALCULATORS TO EMPHASIZE NET PRICE

DESIGN CONCEPT

1) Redesign college search tools to emphasize net price by income rather than sticker price

- Make net price the **first and most salient figure** on main college profile pages so prospective students don't have to dig for the information
- Instead of showing full sticker price (which is higher than most students pay) or average net price (which is too high for lower-income households and too low for higher-income households), display net price **for the lowest income segment**, with the ability to see more granular data by income segment on a subsequent page or link

DESIGN CONCEPT

2) Build a streamlined Net Price Calculator (NPC) and incorporate into widely used tools

- **Simplify and sequence required input** to help students get a "foot in the door" (e.g., use zipcode or free/reduced lunch status to generate a quick estimate) and provide the ability to refine estimate with additional data on a subsequent page
- **Draw in existing data or proxy information** to reduce data input required (e.g., integrate FAFSA data, national averages)
- **Facilitate action** by linking the final net price to next steps (e.g., filing FAFSA or applying to colleges)

IMPROVE
SCALED TOOL



IMPROVE
SCALED TOOL



NONTRADITIONAL

MINORITY

LOW-INCOME

IDEA #3: CORRECT THE MISPERCEPTION

CHANGE MENTAL MODELS THROUGH GENERATIVE LEARNING

DESIGN CONCEPT

Provide repeated doses of information to change mental models about college costs

- From prior research, we know that **repeated doses of information** through an engaging activity can change perceptions¹
- Create an **engaging activity** such as a game or exercise where students reveal their perceptions of affordability and generate their own answers to correct these perceptions
- Incorporate into programming that **reaches students early enough** to affect later decision-making (e.g., college readiness programs at secondary level or even Children's Savings Account initiatives at primary level)

"Ideally any student on free lunch would start get messaging about college affordability starting in middle school"
-expert interview

NEW PRODUCT



Datta et al. "Risking it all for love? Resetting beliefs about HIV risk among low-income South African teens." *Journal of Economic Behavior & Organization* 118 (2015): 184-198.

TRADITIONAL

MINORITY

LOW-INCOME

IDEA #4: EXPAND THE CHOICE SET

HELP STUDENTS CONSTRUCT FULL CHOICE SET

DESIGN CONCEPT

Improve college list building functionality with factors that include cost

(see Consumer Information Section 2, Idea #1)

- Make **search for good fit frictionless** based on GPA, SAT, and location
- **Include cost** as potential factor within weighted criteria (using average cost for lowest income segment as the default to avoid overestimating cost)
- Create a **default application mix** (e.g., 2 safety, 2 reach, 4 fit) and automate assignment of schools into slots
- Where appropriate, include links to simplified Net Price Calculators (NPC) to **further refine estimates**

IMPROVE
SCALED TOOL



TRADITIONAL

MINORITY

LOW-INCOME

IDEAS #5+6: ELIMINATE STICKER PRICE

REPLACE STICKER PRICE WITH ALTERNATIVE INFORMATION

DESIGN CONCEPT

5) *Redesign college ranking sites so that sticker price is no longer reported first*

- On main page of ranking sites, show **average net price for the lowest income segment** rather than sticker price
- Link to more detailed information broken out by segment and/or net price calculators for **more refined estimates** where desirable
- Depending on extent of the changes, could **require coordination** with state/federal policy-makers as well as schools to change how information is reported, shared and presented

IMPROVE
SCALED TOOL



DESIGN CONCEPT

6) *Screen for eligibility in scholarship programs and advertise opportunity directly to students*

(see Consumer Information Section 2, Idea #2)

- Builds on ongoing research around **advertising scholarship invitations directly to students**, pre-application (e.g., based on test score, GPA and subsidized lunch data)
- **No ambiguity** about eligibility for scholarship or costs to student (conditional upon admission)
- Information received **early enough** to shape the student's perception of college options

SYSTEMS
CHANGE



NONTRADITIONAL

MINORITY

LOW-INCOME

FINANCIAL CAPABILITY APPLICATION STAGE

During the application stage, a complex financial aid process causes students to make suboptimal financial decisions.

APPLICATION DECISION POINTS

SUBOPTIMAL AID DECISIONS HAVE SERIOUS CONSEQUENCES

RELEVANT DECISIONS

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

IMPLICATIONS

students may not
apply for aid at all

students may under-
or over-borrow

students may choose a
suboptimal aid allocation
(private vs federal)

THE PROBLEM

MANY STUDENTS WHO WOULD BENEFIT FROM AID DON'T APPLY

- 61% of surveyed students who didn't file the FAFSA thought they were ineligible (~1.7M students each year)¹
- Students who drop out are less likely to have financial aid²

1/3 of those who didn't file would have qualified for Pell¹

1. Kantrowitz, 2011. 2. Public Agenda, 2011.

THE PROBLEM

STUDENTS STRUGGLE TO OPTIMIZE THEIR BORROWING

- Students choose private loans when still have federal loans available or have not filed FAFSA at all¹
 - 47% of private loan borrowers borrowed less than they could have in Stafford loans
 - Half of private loan borrowers attend schools that charge less than \$10,000 in tuition and fees
- More than two-thirds of student loan borrowers misunderstood or were surprised by some aspect of their student loans²
 - 24% of Millennials think their student loans will be forgiven³

“You **don’t know what you’re paying for**, don’t know what it’s covering. [When I started to get collection notices, and my credit score dropped because of my student loans,] I was really confused, overwhelmed, didn’t know what I was going to do.”
-community college student interview

“Students **have no way to conceive of ‘reasonable debt’** when choosing loans.”
-expert interview

“Our students are **borrowing a lot more than is necessary.**”
-expert interview

1. TICAS 2014. 2. Whitsett, 2012. 3. Junior Achievement & PwC, <https://www.juniorachievement.org/documents/20009/20652/Millennials+and+College+Planning.pdf>.

THE PROBLEM

AID IS EVEN MORE CONFUSING FOR RISK SEGMENTS

- 92% of households earning less than \$50K are packaged with Pell, but nearly half of students in that income bracket unfamiliar with Pell¹
- Hispanic students less likely than others to be aware of institutional scholarships or student loans¹
- Older students are less likely to expect to receive various forms of aid than younger students¹
 - For example, 66% of prospective students aged 16-19 expect to receive grants/scholarships from a college, but only 35% of prospective students aged 20-23 and 27% of prospective students aged 24-29 do

“It can be extremely difficult to estimate in advance the repayment burden and risk associated with a given loan amount...young people, **especially those from low-income families, are prone to making financial mistakes.**”²

“I don’t know what, I thought I wouldn’t have to pay it...I think **I thought because I left I wouldn’t have to pay.**”

-community college student

NONTRADITIONAL

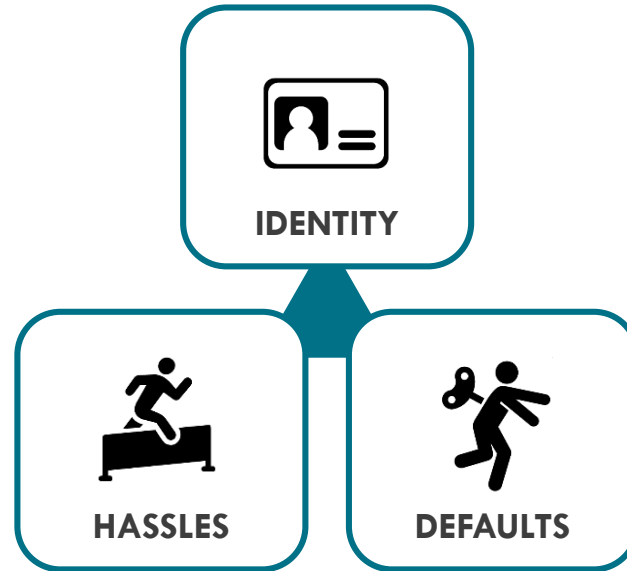
MINORITY

LOW-INCOME

1. New America College Decisions, 2015. 2. Scott-Clayton, 2012.

BEHAVIORAL DRIVERS

THREE PRIMARY FACTORS SHAPE AID DECISION-MAKING



BEHAVIORAL DRIVERS: IDENTITY, HASSLES

HASSLES CAUSE DROP-OFF + REINFORCE NON-COLLEGE IDENTITY



IDENTITY



HASSLES

- We know that even seemingly small **hassles** within a process can cause disproportionate drop-off – and cause **identity conflict** as students wonder whether college is a good fit for them
- “The complexity of the [FAFSA] application, which requires students and families to provide an array of information about their income, assets, and family composition, may deter college-ready, low-income students from successfully matriculating”¹

“For me **applying to scholarships was a full-time job**, and I would spend a day researching them. I’d fill out all the basic info first, and spend the next week writing essays and revising them and meeting with teachers to revise and apply. I spent at least 40 hours a week doing those things. My friends knew about it **but I don’t think they have enough time to do that.**”

-college student interview

“There are an **immense number of small barriers** to getting financial aid.”

-expert interview

1. Castleman & Page, 2014.

RECENT EFFORTS

INITIATIVES TO SIMPLIFY THE FAFSA HAVE GAINED SOME TRACTION

- Web-based FAFSA includes skip logic and IRS data retrieval tools, thereby simplifying the application process – but the application remains lengthy and complex
- Recent legislation proposes changing the FAFSA to a two-item postcard¹
 - Radically simplifying the FAFSA could produce similar distributions of aid with much lower cost of complexity²
 - Notably, there are trade-offs between simplifying input requirements and making later verification procedures more onerous

1. <http://www.help.senate.gov/chair/newsroom/press/senators-alexander-bennet-would-cut-100-question-student-aid-form-to-2-questions>. 2. Dynarski & Scott-Clayton, 2006.

BEHAVIORAL DRIVER: DEFAULTS

CHOICE ARCHITECTURE FAILS TO PROMPT AN ACTIVE CHOICE



DEFAULTS

- We know that people are much more likely to stick with the “**default**” option across domains, from retirement planning to organ donation
- Research suggests that students struggle to determine and actively select the right amount/type of aid for them: When considering aid offers, students are overly influenced by language and framing¹
- Changing the default has been shown to change aid take-up outcomes: College of Western Idaho added “recommended loan amount” to award letters, which resulted in significant decreases in loan volume and loan amounts²

1. Marx & Turner, 2015. 2. Expert interview.

RESEARCH

OFFERING SIMPLER INFO + ASSISTANCE CAN CHANGE THE DEFAULT

- A text messaging campaign with simplified aid information and an offer to connect one-on-one with an adviser changed borrowing outcomes among Black students and low-income students¹

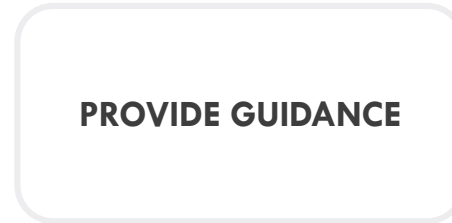
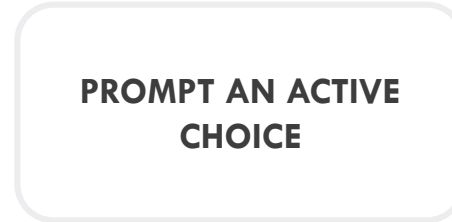
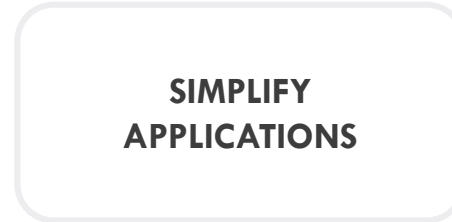
Borrowing declined by \$**439** for Black students and \$**358** for students in the lowest EFC quartile

- Data on educational attainment not yet available

1. Barr et al., 2016.

POTENTIAL SOLUTIONS

THREE TYPES OF SOLUTIONS COULD HELP ADDRESS THIS PROBLEM



IDEA #1: SIMPLIFY APPLICATIONS

CREATE A “TURBOTAX” FOR FAFSA

DESIGN CONCEPT

Develop a seamless tool that guides students through the FAFSA process from start to finish

- Build on existing efforts to simplify FAFSA by creating a more **customized experience** where data input is tailored to the student’s unique situation
- Even a process with heavy data input requirements doesn’t have to feel that way if the user experience takes one step at a time, guides the user through the process, feels like a **conversation**
- Explain terminology where unclear, with **support available** (e.g., phone, live chat, robo-chat)
- Tool could be **embedded** into official FAFSA sites or exist as a separate platform

NEW PRODUCT



NONTRADITIONAL

MINORITY

LOW-INCOME

IDEA #2: PROMPT AN ACTIVE CHOICE

EXPAND AID OFFER TOOL TO NUDGE A MORE THOUGHTFUL CHOICE

DESIGN CONCEPT

Prompt students to consider, calculate, and reflect on borrowing amount before taking up aid offers

- Make aid take-up an **active choice** by prompting students to calculate the right amount and type of aid for their unique situation before taking up an offer
- First, help students complete a simple budgeting exercise to estimate the amount of aid they will need to **cover costs** during the semester, including rules-of-thumb to help students avoid mistakes (e.g., how many hours they expect to work during school)
- Second, help students consider **whether future debt is sustainable** (“reasonable debt check”) by estimating if expected loan payments are feasible given projected earnings
- **Guide students through calculations** to avoid drop-off within the process

IMPROVE
SCALED TOOL



NONTRADITIONAL

MINORITY

LOW-INCOME

IDEA #3: PROVIDE GUIDANCE

OFFER ADVISING AT SCALE USING VIRTUAL ADVISORS

DESIGN CONCEPT

Scale up advising services via technology by using virtual advisors as a connection point to human advisors

- Build on efforts already underway by refining and scaling **virtual advisors** via existing platforms
- **Target particular moments** in the student process when decision-making is difficult (e.g., filling out FAFSA, taking up aid offers)
- To increase quality of advice, create a “**backstop**” with **human advisors** to tackle tougher questions where robo-advising does not suffice (can use lighter-touch channels like email, live chat, or text message)

NEW PRODUCT



NONTRADITIONAL

MINORITY

LOW-INCOME

FINANCIAL CAPABILITY COLLEGE STAGE

Once in college, students struggle to manage their finances and build financial health, which puts their academic progress at risk.

COLLEGE DECISION POINTS

FINANCIAL “MISTAKES” IN COLLEGE HAVE SERIOUS CONSEQUENCES

RELEVANT DECISIONS

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

IMPLICATIONS

students may run out of money during the semester

students may work too much or take fewer credits

financial stress may decrease cognitive bandwidth for academic performance

THE PROBLEM

STUDENTS STRUGGLE TO MANAGE FINANCES DURING COLLEGE

- 26% of 2-year students report living paycheck to paycheck¹
- 31% of students that dropped out indicated financial reasons as the reason for leaving²
- Over 50% of students report “having enough money to last the semester” causes stress¹

“Financial stress is sophomore year, and after sophomore year it’s that hump where **you don’t know if you want to continue**; especially if you took out loans for freshmen year and sophomore year.”

-college student interview

“I never thought about if I could stay in college, but I thought about HOW I could afford to do it and what I could eat and all that. **When I knew I was running short on money it was more stressful and took up more cognitive space then.**”

-college student interview

1. HigherOne & Everfi, 2015. 2. Ross et al., 2012.

THE PROBLEM

STUDENTS END UP WORKING TOO MUCH OR TAKING TOO FEW CREDITS

- Needing to work the top reason students report for dropping out¹
- 74% of students work an average of 25.5 hours per week, yet academic success is compromised when students work more than 20 hours per week²

“By end of school I had issues with not getting enough [money] because tuition kept increasing but my scholarship did not change. **So I ended up working more.** I worked 3 jobs, on and off-campus.”

-college student interview

- Finances may prevent students from taking enough credits³
 - Charging no additional fees for taking more credits can lead to an increase in course enrollment*
- 23% of students who take only 24-29 credits in their first year drop out within 6 years³

*Intervention was also paired with a publicity campaign to advertise the “free”

1. Public Agenda, 2011. 2. Dundes & Marx, 2006-2007; McMillin & Persna, 2010. 3. Complete College America, 2013.

THE PROBLEM

RISK SEGMENTS FACE EVEN MORE COMPLEXITY

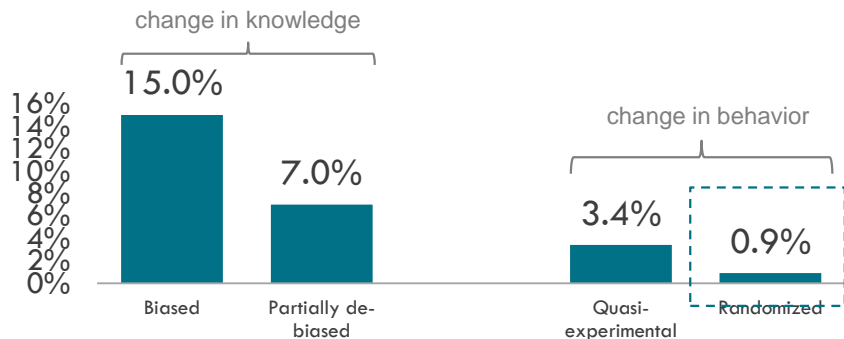
- Lower-income households face significant financial volatility, with an income dip every third month¹
- Non-traditional students especially likely to have family obligations that require time and money, making full-time attendance difficult²
- 61% of recently enrolled adult students worried about not being able to afford to stay in college³

1. Hannagan & Morduch 2015. 2. Public Agenda, 2013. 3. New America College Decisions 2015.

RESEARCH

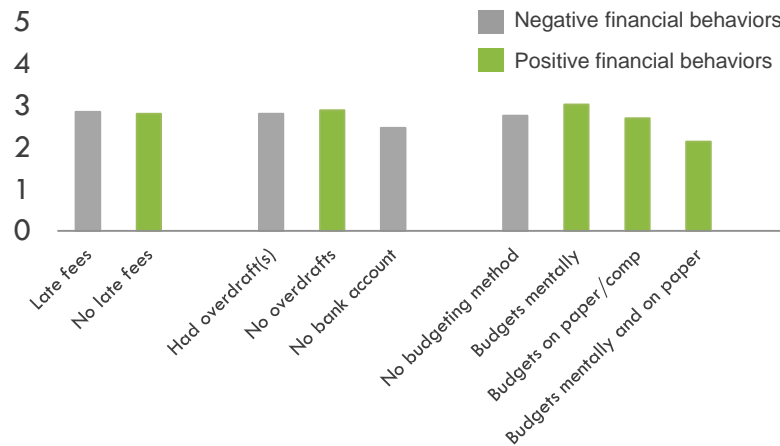
FINANCIAL EDUCATION IS NOT AN EFFECTIVE SOLUTION

Meta-Analysis of 201 Studies of Financial Literacy and Counselling



Traditional financial literacy programs increase knowledge, but don't change behavior.

Average Financial Literacy Score (out of 5)

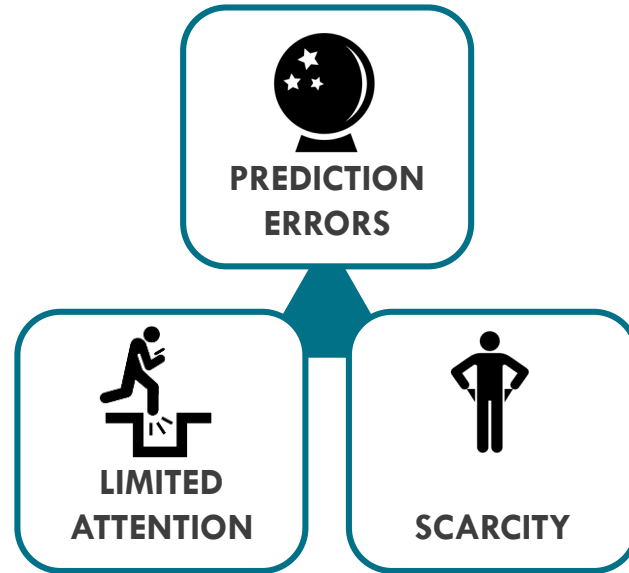


Higher financial literacy scores don't translate into better financial health.

Fernandes, Lynch, & Netemeyer, 2014; <http://www.usfinancialdiaries.org/83-charts/>

BEHAVIORAL DRIVERS

THREE PRIMARY FACTORS SHAPE FINANCIAL OUTCOMES IN COLLEGE



BEHAVIORAL DRIVER: LIMITED ATTENTION

TAKING ACTION ON FINANCES IS DIFFICULT DURING SCHOOL



**LIMITED
ATTENTION**

- We know that people have a finite capacity for **attention**, and students are even more attention-constrained when focusing on school
- Less than 20% of students report using a money management app or program¹
- If students aren't already using savings accounts, opening account + learning how to use it is daunting and difficult
 - Only 60-65% of students have individual checking accounts, suggesting relatively high use of alternative financial services¹

“Tools just **throw information** at students, they don't help them decide anything.”
-expert interview

“If there were **more rules**, maybe it would be a little easier”
-community college student interview

“There are lots of great tools out there, but **needs a bridge** to explain why to use them and what it tells me, how it helps me make a decision”
-expert interview

1. Higher One & Everfi, 2015.

BEHAVIORAL DRIVER: PREDICTION ERRORS

HUMANS ARE BAD AT MAKING COST ESTIMATES ABOUT THE FUTURE



PREDICTION ERRORS

- We know that people are bad at **making estimates** about the future
- As humans, we systematically underestimate the frequency of “exceptions” (e.g., electronics, celebrations) and overspend on them¹
- Many students don’t actively budget their money
 - Only 40% of 4yr students and 60% of 2yr students use budgets²

“Car fare is huge. **Didn’t realize that I was going to have to pay for things like books and pencils until I got the bill.**”

-community college student interview

“[My college] has a financial aid/tuition calculator, and it could give me a rough estimate. But I didn’t know how much money I would be spending until I [got there]. There are all sorts of other fees. Fees for classes, fitness fee, fees for being on campus...A fee for everything you can think of, technology fee... **close to \$2,000 per year in fees I didn’t expect at all.**”

-college student interview

1. Sussman & Alter, 2012. 2. Higher One & Everfi, 2015.

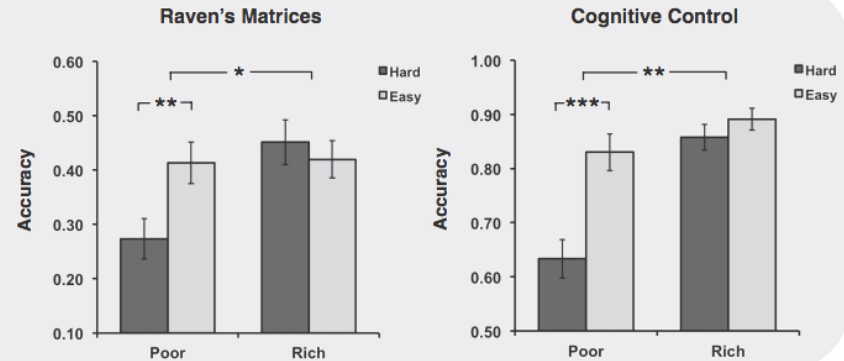
BEHAVIORAL DRIVER: SCARCITY

SCARCITY REDUCES SELF-CONTROL, PLANNING FOR LONG TERM



SCARCITY

Living without a financial cushion in a context of **scarcity** can decrease “mental bandwidth,” making it difficult to exercise self-control and plan for the long-term¹



- Many college students live without much cushion, and are worried about their finances:²
 - 55-65% worry about the **cost of books & supplies**
 - 44% worry about **student loans**
 - 50-60% worry about **having enough financial aid** or **applying for aid**
 - 40-50% worry about **tracking their spending**

1. Mani et al., 2013. 2. Higher One & Everfi, 2015.

RESEARCH

GOOD BEHAVIORAL DESIGN PROMPTS ACTION AND IMPROVES FINANCIAL HEALTH OUTCOMES

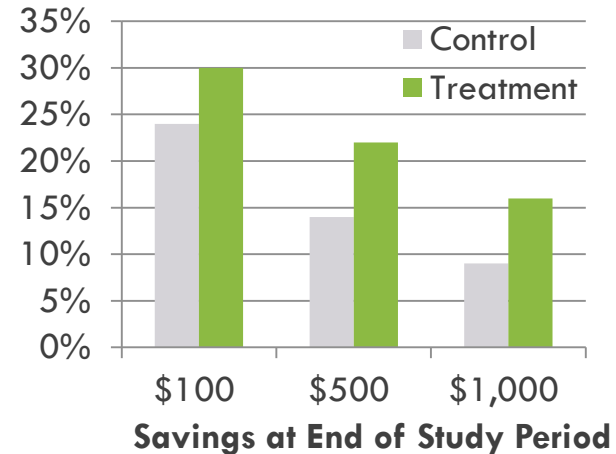
- **Naming savings goals** with reminders help people save more money¹
- Text message **reminders** for important financial deadlines can motivate action²
- **Partitioning money** into different envelopes can help consumers spend less³
- **Facilitating action** by having a bank representative present at a financial education workshop targeting low income consumers significantly increased account opening as well as usage of accounts⁴

1. Karlan et al., 2010. 2. Castleman 2014. 3. Cheema and Soman, 2008 . 4. Bertrand et al 2006.

RESEARCH

“BEHAVIORAL” FINANCIAL COACHING PROMPTS ACTION

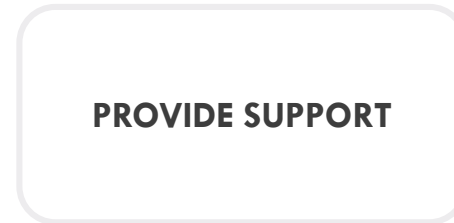
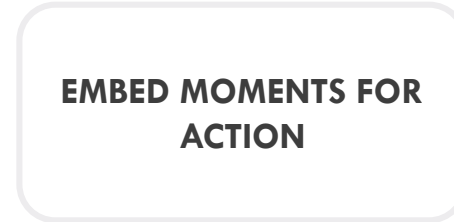
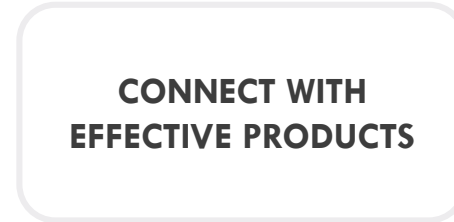
- Action-oriented financial coaching is a potential avenue for connecting students with effective products and services
 - Financial Health Check (FHC) pilot 1.0 results: 20% higher savings among consumers who previously had no savings
 - FHC 2.0 preliminary results: ~30% of participants automate savings or debt repayment



Financial Health Check Pilot

POTENTIAL SOLUTIONS

THREE TYPES OF SOLUTIONS COULD HELP ADDRESS THIS PROBLEM



IDEA #1: CONNECT WITH EFFECTIVE PRODUCTS

TAILOR PRODUCTS AND OFFER WITHIN STUDENT EXPERIENCE

DESIGN CONCEPT

Create financial products tailored to the student context and integrate into the student experience

- Build financial products that uniquely address the student context and help them manage their finances effectively:
 - Help students **budget + track** spending within a deposit account to avoid: 1) running out of funds before the end of the semester, or 2) working too much and putting academic success at risk
 - Nudge students to set aside an emergency **savings cushion** at the start of the semester to combat prediction errors and cover unexpected expenses that arise
 - Offer access to **affordable credit** for situations where savings are insufficient to cover an expense and/or **credit-building** products for students who have not yet built a credit history
- Work with institutions to **integrate** products and services directly into the student experience (e.g., deliver via “student Financial Health Check”)

NEW PRODUCT



NONTRADITIONAL

MINORITY

LOW-INCOME

IDEA #2: EMBED MOMENTS FOR ACTION

INTEGRATE PLANNING + TRACKING TOOLS INTO STUDENT EXPERIENCE

DESIGN CONCEPT

Create moment for budgeting + goal-setting, with customized reminders to help follow-through

- From the very beginning of the semester, help students take meaningful action on their finances:
 - Students **budget + track** spending within a deposit account
 - Students set aside **savings cushion** at start of semester
 - Students select **other financial goals** and track progress (e.g., reduce spending by bringing lunch from home)
- Follow-up with **timely reminders** at key moments (e.g., email and text reminders customized by the student)
 - Consider additional **delivery channels** like a mobile app
- Embed into **first-year student courses** or other natural programming

NEW PRODUCT



NONTRADITIONAL

MINORITY

LOW-INCOME

IDEA #3: PROVIDE SUPPORT

MAKE EMERGENCY AID PROGRAMS MORE PROACTIVE

DESIGN CONCEPT

Design “behaviorally informed” emergency aid program and rigorously test results

- Make emergency aid programs **proactive rather than reactive** by using that moment of engagement with students to address underlying financial issues
 - Collect comprehensive data to improve **targeting** of students who may be in need of aid and inform design of program
 - Build in mechanisms to help participants **avoid future financial crises** (products, planning + tracking tools, savings nudges, etc.)
- **Test alternative designs**, refine and scale based on results



NONTRADITIONAL

MINORITY

LOW-INCOME

SUMMARY: FINANCIAL CAPABILITY RECOMMENDATIONS

Decision Points	Recommendations
<p>In the pre-application and application stages, misperceptions about college affordability limit the schools that students consider in their choice sets.</p>	<ol style="list-style-type: none"> 1. Redesign college search tools to emphasize net price by income 2. Build a streamlined net price calculator and incorporate into widely-used tools 3. Provide repeated doses of information to correct mental models about college affordability 4. Help students construct + populate college choice set 5. Replace sticker price with alternative information 6. Conduct scholarship screening earlier
<p>During the application stage, a complex financial aid process causes students to make suboptimal financial decisions.</p>	<ol style="list-style-type: none"> 1. Create a “turbotax” for FAFSA 2. Expand aid offer tool to nudge a more thoughtful choice 3. Offer advising at scale using virtual advisors
<p>Once in college, students struggle to manage their finances and build financial health, which puts their academic progress at risk.</p>	<ol style="list-style-type: none"> 1. Tailor financial products and offer within student experience 2. Integrate planning + tracking tools into the student experience 3. Enhance and test emergency aid programs

SUMMARY: ALL RECOMMENDATIONS

Area	Decision Points	Recommendations
CONSUMER INFORMATION	During the pre-application stage, signals in students' environments about themselves and the college process can have significant influence on decisions about college.	<ol style="list-style-type: none"> 1. Test and scale universal college savings account programs 2. Spread state policies that require offering the SAT/ACT during school
	During the application stage, students use problematic shortcuts when deciding which schools to apply to and enroll in.	<ol style="list-style-type: none"> 1. Work with scaled tools to improve list-building functionality 2. Build platform to enable innovations 3. Centralize and automate application fee waivers 4. Create a college application "concierge" service 5. Test and scale application nudge app
FINANCIAL CAPABILITY	In the pre-application and application stages, misperceptions about college affordability limit the schools that students consider in their choice sets.	<ol style="list-style-type: none"> 1. Redesign college search tools to emphasize net price by income 2. Build a streamlined net price calculator and incorporate into widely-used tools 3. Provide repeated doses of information to correct mental models about college affordability 4. Help students construct + populate college choice set 5. Replace sticker price with alternative information 6. Conduct scholarship screening earlier
	During the application stage, a complex financial aid process causes students to make suboptimal financial decisions.	<ol style="list-style-type: none"> 1. Create a "turbotax" for FAFSA 2. Expand aid offer tool to nudge a more thoughtful choice 3. Offer advising at scale using virtual advisors
	Once in college , students struggle to manage their finances and build financial health, which puts their academic progress at risk.	<ol style="list-style-type: none"> 1. Tailor financial products and offer within student experience 2. Integrate planning + tracking tools into the student experience 3. Enhance and test emergency aid programs

AREAS FOR FUTURE RESEARCH

AREAS FOR FUTURE RESEARCH

PARENTAL ROLE IN COLLEGE ENROLLMENT

PROBLEM: Only 52% of students in bottom income quintile enroll in PSE directly after high school, compared to 82% in top income quintile¹

- Low-income and first-generation students are more likely to undermatch than higher-income peers and peers whose parents attended college²

CURRENT EFFORTS + OTHER IDEAS:

- Personalized light-touch teacher-parent communication can increase credit completion among HS students in a credit recovery program by 40%³
- College Advising Corps is piloting an intervention to text parents year-round in order to “activate” the college process⁴
- Explore identity-building strategies in elementary school, leveraging CSA

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

FIRST GEN

LOW INCOME

1. Baum et al., 2013. 2. Smith et al., 2013. 3. Kraft & Rogers, 2014. 4. Expert interview

AREAS FOR FUTURE RESEARCH

ACADEMIC READINESS AND REMEDIATION

PROBLEM: Majority of community college students required to take at least 1 remedial course, but less than 25% graduate with any credential within 8 years¹

- Mixed results: placement into remediation increases likelihood of drop-out or transfer to lower-level college, but students who complete remediation are less likely to dropout (though take longer to complete their degrees)²

CURRENT EFFORTS + OTHER IDEAS:

- Dual-enrollment programs increase readiness *before* students enroll in college³
 - Can significantly increase completion among low-income students
- Promising co-requisite model being piloted in CO, GA, IN, TN, WV¹
 - Potential to double 2-year graduation of remedial students

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

1. Palmer, 2016. 2. Bettinger & Long, 2005. 3. An, 2013.

AREAS FOR FUTURE RESEARCH

COLLEGE COUNSELOR GUIDANCE

PROBLEM: College counselors themselves face challenges in giving high-quality advice to students

- Low-income students underserved by high school guidance counselors, who serve twice as many students as the national average (1,000 vs. 470)¹
- Counselors may experience similar mental model challenges as students do (e.g., selective = expensive)

Some college counselors steer most students to the same five or six schools.
-expert interview

CURRENT EFFORTS + OTHER IDEAS:

- Adding a high school counselor increases 4-year college going by 10 percentage points²
- uAspire partners with schools to place an expert college financing advisor to advise students collaboratively with counseling staff; trains practitioners on financial aid³

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

1. Haskins, 2009. 2. Hurwitz & Howell, 2013. 3. Expert interview

AREAS FOR FUTURE RESEARCH

NONTRADITIONAL STUDENTS AND PROGRAM QUALITY

PROBLEM: Nontraditional students are much more likely to enroll in for-profit institutions than traditional students¹

- Students over 25 make up ~70% of students at 4-year for-profit schools and ~50% of students at 2-year for-profit schools¹
- 64% of adult prospective students report learning about schools from television commercials, billboards, or other ads¹

CURRENT EFFORTS + OTHER IDEAS:

- Starbucks has created a channel to connect employees with high-quality educational opportunities (including financial support) at ASU²
- Create mass market advertising for high-quality schools targeting nontraditional students
- Take a multigenerational approach by leveraging traditional students' college search process to nudge their parents' toward high-quality programs

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

1. Aud et al., 2013. 2. <http://www.starbucks.com/careers/college-plan>. 3. Public Agenda, 2013.

AREAS FOR FUTURE RESEARCH

LINKING CAREER AND MAJOR ASPIRATIONS TO COLLEGE/PROGRAM CHOICE

PROBLEM: “Major choice is one of the most important factors in college success, but students have to make this choice with very little guidance.”¹

- Students who drop out were less likely to have chosen a school based on career or major interest, and more likely to choose based on affordability, scheduling, or location²

CURRENT EFFORTS + OTHER IDEAS:

- ASU’s me3 app links a personality test with 3 potential careers and translates into exactly which classes to take³

Understanding different career options may increase participation in different academic experiences in high school as well as college choices.

-expert interview

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ’S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

1. Expert interview. 2. Public Agenda, 2011. 3. <https://webapp4.asu.edu/eadvisorhs/app/>

AREAS FOR FUTURE RESEARCH

LONG-TERM IMPACT OF SUMMER MELT INTERVENTIONS

PROBLEM: 10-40% of college-intending high-school graduates who have been accepted into college never enroll; low-income students are less likely to persist and graduate than higher-income peers¹

CURRENT EFFORTS + OTHER IDEAS:

- Personalized text reminders in the summer after high school increased enrollment among college-intending high school graduates by 7 percentage points, but connection to completion has not yet been made¹

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

1. Castleman & Page, 2010.

AREAS FOR FUTURE RESEARCH

COLLEGE PERSISTENCE FOR COMMUNITY COLLEGE AND TRANSFER STUDENTS

PROBLEM: Students who transfer from a community college to a 4-year school are 15-25 percentage points less likely to complete a degree than comparable students who began at a 4-year college¹

- Although 80% of community college students intend to transfer to a 4-year school, only 23% do within 6 years²
- African American and Hispanic community college students less likely to transfer to a 4-year institution or earn a degree within 6 years²

CURRENT EFFORTS + OTHER IDEAS:

- Mindset intervention to reset adversity as the norm and reminders about administrative deadlines increased persistence among underrepresented minority and low-income students at a community college³
- Workshops and repeated messaging around grit and growth mindset reduced SAP violations among minorities at a 4-year school³

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

LOW-INCOME

MINORITY

1. Monaghan & Attewell, 2014. 2. Crisp & Nunez, 2014. 3. ideas42 research, in press

AREAS FOR FUTURE RESEARCH

COLLEGE PERSISTENCE FOR NONTRADITIONAL STUDENTS

PROBLEM: Nontraditional students are twice as likely to have dropped out within six years and one-fifth as likely to complete a Bachelor's degree as traditional students¹

CURRENT EFFORTS + OTHER IDEAS:

- Many CUNY campuses offer onsite childcare programs
- Bundled services center like SparkPoint “serve the whole person”, helping students in need of food, financial products, and financial coaching, among other services²
- CUNY's Accelerated Study in Associate Program (ASAP) doubles graduation rate of community college students through free tuition, advising, and other financial supports³

SHOULD I GET A DEGREE?

AM I READY FOR COLLEGE?

AM I WILLING/ABLE TO FULFILL
ADMISSIONS REQ'S?

WHICH COLLEGE TO APPLY/ENROLL?

(HOW) CAN I AFFORD COLLEGE?

WHAT MAJOR?

DO I STILL WANT TO GO (SUMMER)?

SHOULD I STAY?

1. NCES, 2010. 2. Expert interview. 3. Scrivener et al., 2015.



ideas **42**
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Note any ideas presented in this document do not represent the views of those listed above.

APPENDIX A

PRIMARY & SECONDARY RESEARCH

METHODOLOGY

A. HIGH SCHOOL STUDENTS

- 11 low-income students (6 female)
 - 10 first-generation students
 - Age range: 16-19
 - Grades: 7 juniors, 3 seniors, 1 repeating senior year
 - Avg. household income: \$25,000-29,000

METHODOLOGY

B. COLLEGE STUDENTS

- 5 four-year college students (2 female)
 - 3 first generation
 - Age range: 18-23
 - Grade range: Freshman to one year post-back
 - Recipients of Pell, President's scholarships, and military scholarships
- 3 community college students (1 female)
 - 2 nontraditional
 - Age range: 19-30
 - All in first year of current program
 - Recipients of Pell

METHODOLOGY

C. PARENTS

- 5 parents of high school and college students (all female)
 - 2 who themselves were nontraditional students
 - 2 unemployed
 - Age range: 38-55
 - Avg. household income: \$25,000

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APPENDIX B

MARKET SCAN OUTPUTS AND METHODS

MARKET SCAN GOALS

1. **Understand the current market landscape** of existing consumer information and financial literacy tools, products, methods, services, and providers
2. **Create or utilize current taxonomies** familiar to the field of types of available tools, providers, and data sources
3. **Develop rubrics for assessing tools and providers** along key dimensions (e.g. target audience, data/metrics, modality, usability, efficacy, scalability)
4. **Assess existing tools/providers**

STUDENTS FACE A FRAGMENTED MARKET OF RESOURCES



TODAY'S DIGITAL TOOLS HAVE LIMITED IMPACT

- Students mistrust and underutilize digital tools in the college process¹
- Risk segments even less likely to use and benefit from online tools
 - Less than 20% of adult prospective students have used an interactive website to research schools,² and over 60% felt “lost” researching college or financial options³
 - Low-income high school students lack the knowledge and support needed to navigate financial aid resources online⁴

“There are lots of great tools out there, but **they need a bridge to explain why to use them** and what it tells me, how it helps me make a decision.”

-expert interview

“Tools just throw information at students, **they don't help them decide anything.**”

-expert interview

1. TICAS, 2008. 2. Public Agenda, 2013. 3. New America College Decisions, 2015. 4. Whitsett & Allison, 2015.

ALIGNING THE TOOL MARKET LANDSCAPE WITH THE DECISION MAP

	Number of Tools	Significant Market Density?
SHOULD I GET A DEGREE?	7	X
AM I READY FOR COLLEGE?	3	X
AM I WILLING/ABLE TO FULFILL ADMISSIONS REQ'S?	5	X
WHICH COLLEGE TO APPLY/ENROLL?	27	✓
(HOW) CAN I AFFORD COLLEGE?	31	✓
WHAT MAJOR?	6	X
DO I STILL WANT TO GO (SUMMER)?	0	X
SHOULD I STAY?	0	X

TAKEAWAYS FROM THE MARKET SCAN

- Wealth of informational tools to **compare colleges** and **understand how to afford college**, nearly to the **exclusion of every other decision** on the decision map
 - We located especially significant gaps in the “Should I get a degree?” and “Should I stay in college?” decisions, which are highly personal
- Tools are overwhelmingly biased towards the provision of information at the expense of **provision of guidance** or **facilitation of action**

TAKEAWAYS FROM THE MARKET SCAN

WELL-SERVED AREAS

- “Which college?” and “How can I afford college?” are the most richly tool-served decisions
 - Most tools in these spaces focus on **providing specific information** designed to facilitate choice
 - In these areas, we generally recommend **improving and refining tools** to move from providing information to **providing guidance and prompting actions**

TAKEAWAYS FROM THE MARKET SCAN

POORLY-SERVED AREAS

- We found that the other decisions (“Should I go to college?”, “Am I ready?”, “Can I fulfill the requirements?”, “What should I major in?”, and “Should I stay?”) were rarely addressed directly by tools
 - These decisions are **intensely personal**, and students may feel that digital tools are not the most effective way to receive guidance on them
 - Where addressed, they were often accessories to the main function of a tool that focused on “Which college?” and “How can I afford college?”
 - In these areas, we generally recommend the **development of specific tools** that integrate new findings from social psychology to help students address these more personal decisions

METHODOLOGY: INITIAL SCAN

1. Four methods of initial scan

- i. Expert interviews, student & parent interviews, independent searches, identification of “top tool” lists

2. Filtering process and direct testing of tools by students

- i. ideas42 identified high-reach and potentially high-impact tools for direct testing
- ii. Student testers rated tool quality and categorized where they fit into decision map

3. Evaluated tool landscape within each decision to develop an understanding of the contours of the digital tool market

- i. Identified where tool market succeeds and fails at supporting student decision-making
- ii. Identified common pitfalls of tools within well-resourced decision areas
- iii. Identified where features of successful tools can be replicated at scale for maximum impact

METHODOLOGY: INITIAL SCAN

A NOTE ON KEYWORD SEARCHES

- Our online search strategy was designed to reflect how students actually look for college information

“If I had asked Google more questions, maybe I wouldn’t have this much debt right now.”

-Community college student

“[When I have questions], I just always throw things in Google and whatever comes up...”

-Community college student

“If they are just Googling their way through this process, they can run into some things that are really unfortunate.”

-Expert interview

METHODOLOGY: EVALUATION APPROACH

- Hired 3 New York City high school students to act as “mystery shoppers”, rating tools according to a template designed to evaluate the behavioral bottlenecks we wanted to assess
- Students directly used each tool for 30 minutes – 1 hour, indicated which parts of the decision map it was designed to address, and then rated its performance from 1-7 on several categories
- Students rated 71 tools over 6 weeks

METHODOLOGY: EVALUATION CATEGORIES

Easy to find & use

- Easy to find
- Low barrier to access/use
- Looks credible
- Mobile access

Aids decision-making

- Personalized
- Avoids choice overload
- Short/easy to use
- Provides guidance (how to decide)

Helps take action

- Identifies next step
- Facilitates next step

Uniqueness

- Are there other tools like this one?
- What are its strengths & weaknesses?

METHODOLOGY: EVALUATION CATEGORIES

- **Access and uptake**
 - Were you able to find the tool just by searching its name on Google? Were there any other steps needed to get to the main page?*
 - Does the tool require you to log in or create an account to get something useful out of it? Does it feel like the tool is easy to use and get information out of?*
 - Do you trust that the information you're getting is true and accurate? Why or why not? What aspects of the tool make you feel this way? Who sponsors this tool? Do you trust them?*
 - Does the tool work well on a mobile device?*
- **Ability to aid decision-making**
 - Is the information specifically relevant to you, or is it general information for any prospective college student? Did you enter any information about who you are as a student (GPA, test scores, etc.)?*
 - Does it feel like this tool gives you lots of options, or a few options? What will you do with that information? Does the tool help you identify a clear preference (either for college choice or for financial aid options?)*
 - How long did it take you to find the information you were looking for? Was it easy or difficult to find that information?*
 - Does this tool help you make a decision between the options it presents? Is it easy to make that decision?*
- **Ability to drive action**
 - If you were actually using this tool, would you know what to do next on your path to college? What would you do? Did this tool make that step clear?*
 - Does this tool guide you towards taking the next step? Does it provide information about how to do the next thing, or help you get you started on it? Could you use this tool to navigate multiple steps of the college process?*
- **Uniqueness**
 - Have you seen other tools like this before? What are the strengths of this one? Weaknesses?*