

# ***Advancing Transformation with Behavioral Science***

A Toolkit for Post-Secondary Institutions  
(and Beyond)

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# About ideas42



We're a non-profit looking for deep insights into human behavior—into why people do what they do—and using that knowledge in ways that help improve lives, build better systems, and drive social change. Working globally, we reinvent the practices of institutions, and create better products and policies that can be scaled for maximum impact. We also teach others, ultimately striving to generate lasting social impact and create a future where the universal application of behavioral science powers a world with optimal health, equitable wealth, and environments and systems that are sustainable and just for all.

For more than a decade, we've been at the forefront of applying behavioral science in the real world. And as we've developed our expertise, we've helped to define an entire field. Our efforts have so far extended to 40 countries as we've partnered with governments, foundations, NGOs, private enterprises, and a wide array of public institutions—in short, anyone who wants to make a positive difference in people's lives.

ideas42's post-secondary education team uses insights from behavioral science to help more people—particularly those from historically under-represented groups—efficiently complete college degrees that improve their economic well-being. Since 2013, ideas42 has run more than three dozen behavioral interventions that promote college access, retention, and graduation.

Visit [ideas42.org](https://ideas42.org) and follow [@ideas42](https://twitter.com/ideas42) on Twitter to learn more about our work. Contact Rachel Taylor at [rtaylor@ideas42.org](mailto:rtaylor@ideas42.org) with questions.

# Introduction

Colleges and universities across the country are facing unprecedented levels of transformational change. From reassessing recruitment strategies in light of shifting enrollment patterns, to moving course content online because of the COVID-19 pandemic, to rethinking their delivery of student services to meet the needs of a “non-traditional” student population, the post-secondary education landscape is changing by the day. Now more than ever, schools must adapt quickly if they are to ensure financial stability and meet the needs of those they serve.

And yet, large-scale transformation is daunting. Anyone leading a change initiative must gain clarity about the problem they are facing, the reasons that problem is occurring, and the best solution to address it—and working through those steps can be extremely challenging. But even when a school leader has a good sense of the change that’s needed, there’s still plenty of work left to do. Faculty and staff across the college must be open to the change, they must adopt new behaviors to put the change into practice, and they must develop habits in order to ensure the change sticks. ***Individual behavior change therefore has an important role to play in organizational change.***

At ideas42, we think a lot about individual behavior, and we design solutions for barriers that can prevent us from following through on our best intentions. Just as there are barriers that might make it difficult for someone to save more for retirement or follow through on their plan to go to the gym every morning, there are barriers that make it difficult for organizations to implement large-scale change initiatives. Organizational change research provides advice about creating the right culture for transformation, and this toolkit adds a behavioral perspective to the conversation.

In this toolkit, we share strategies school leaders can use to deal with some of the most common behavioral barriers they are likely to face when promoting change. These strategies span the transformation process, from planning for change through managing implementation. For each strategy, we give a brief description of the challenge school leaders are likely to face, why addressing that challenge is important, and what behavioral principles are at play. Finally, we provide tools and tactics that school leaders can use to address the behavioral challenge at hand. While some of these strategies may initially seem obvious, we find that all too often they are overlooked—making change initiatives significantly more challenging, and less successful, than they might have been otherwise.

This toolkit was written with the higher education context in mind, but we hope it will be of use to leaders across a range of fields. Ultimately, by learning about common behavioral barriers to large-scale change and practical tips for addressing those barriers, we hope that readers of this toolkit will be able to bring about the changes they seek faster and with less friction. Above all, we hope that this toolkit will help those who have developed exciting innovations to successfully bring about the changes they seek.

	 <b>Barriers to Change</b>	 <b>Behavioral Principles</b>	 <b>Tools and Tactics to Overcome Barriers</b>
PLANNING FOR CHANGE	People prefer to avoid change, especially when there are lots of options or they're hard to compare.	<ul style="list-style-type: none"> <li>▶ Status quo bias</li> <li>▶ Sunk cost fallacy</li> <li>▶ Ambiguity aversion</li> </ul>	<b>1 Unstick from the status quo</b> <ul style="list-style-type: none"> <li>➔ Highlight the potential benefits</li> <li>➔ Present the status quo as one of several options for the future</li> </ul>
	People may have different visions of the end goal without even realizing it.	<ul style="list-style-type: none"> <li>▶ Mental models</li> <li>▶ Confirmation bias</li> </ul>	<b>2 Set a goal and get on the same page</b> <ul style="list-style-type: none"> <li>➔ Hold a visioning exercise</li> <li>➔ Assign a single person to be in charge</li> </ul>
	People may be reticent to take on new tasks if they feel that's not what they're supposed to be doing.	<ul style="list-style-type: none"> <li>▶ Identity-based motivation</li> <li>▶ Cognitive dissonance</li> </ul>	<b>3 Connect identities to the tasks</b> <ul style="list-style-type: none"> <li>➔ Be clear about future expectations</li> <li>➔ Highlight continuity between identities and new tasks</li> <li>➔ Collaboratively update mission statements</li> </ul>
	People care not only about fair outcomes, but also about fair processes.	<ul style="list-style-type: none"> <li>▶ Procedural justice</li> <li>▶ False consensus effect</li> </ul>	<b>4 Work together from the start</b> <ul style="list-style-type: none"> <li>➔ Create channels for meaningful input</li> <li>➔ Regularly solicit feedback after the launch</li> </ul>
MANAGING IMPLEMENTATION	Small hassles can have a disproportionately large impact on behavior.	<ul style="list-style-type: none"> <li>▶ Hassle factors</li> <li>▶ Procrastination</li> </ul>	<b>5 Simplify, simplify, simplify</b> <ul style="list-style-type: none"> <li>➔ Simplify tasks as much as possible</li> <li>➔ Observe people to spot trouble areas</li> </ul>
	One-off tasks are easy to forget, but habits are automatic and happen without needing to remember.	<ul style="list-style-type: none"> <li>▶ Limited attention</li> <li>▶ Habits</li> <li>▶ Fresh start effect</li> </ul>	<b>6 Build habits to make new tasks stick</b> <ul style="list-style-type: none"> <li>➔ Automate as much as possible</li> <li>➔ Integrate new processes in existing routine</li> <li>➔ Time changes with breaks in routines</li> </ul>
	People systematically underestimate how much time, money, and effort new projects will take.	<ul style="list-style-type: none"> <li>▶ Planning fallacy</li> <li>▶ Overconfidence</li> <li>▶ Negativity bias</li> </ul>	<b>7 Expect delays and build in buffer</b> <ul style="list-style-type: none"> <li>➔ Break big tasks into smaller steps</li> <li>➔ Write out plans in detail</li> <li>➔ Add more slack than you think you'll need</li> </ul>
	Fitting different workstreams back together takes more time and attention than people think.	<ul style="list-style-type: none"> <li>▶ Coordination neglect</li> <li>▶ Curse of knowledge</li> </ul>	<b>8 Leave time for integration</b> <ul style="list-style-type: none"> <li>➔ Ensure frequent and regular communication</li> <li>➔ Budget extra time for integration</li> <li>➔ Put someone in charge of coordination</li> </ul>



# PLANNING FOR CHANGE

# 1

## Unstick from the status quo

Instead of objectively comparing all available options and selecting the best one, people tend to stick with what they're used to. For example, many people continue to drive to work—even when talking public transportation could be easier, cheaper, or more enjoyable. This preference for avoiding change is called **status quo bias**, and it's especially strong when there are abundant options, or when the options are difficult to compare.

Sometimes, people are inclined to stick with the current state of affairs because they've already invested significant time or money in that course of action (like buying a car, and then feeling like they need to get their money's worth). These **sunk costs** can't be recovered and shouldn't impact future decisions, and yet people often double down on commitments in order to justify their past effort—even when they might be better off cutting their losses and changing course.

People also experience **ambiguity aversion**, meaning they are more comfortable with familiar options, and their known downsides, than ambiguous alternatives. They may be especially resistant to trying new things if they have experienced unpopular changes or unsuccessful attempts at change previously (one sweaty, stressful bike commute several years ago doesn't mean that other non-driving options will also be bad).

School leaders wishing to initiate a large-scale change effort should therefore look carefully at their campus context and consider what might make people hesitant to deviate from the status quo—and then consciously work to ensure their team is open to change.



### Behavioral Principles

#### Status quo bias

The human preference for the current state, even when alternatives are better.<sup>1</sup>

#### Sunk cost fallacy

The justification of previous commitments to a (perhaps failing) course of action by continuing to make subsequent commitments.<sup>2</sup>

#### Ambiguity aversion

The tendency to prefer known risks over unknown risks.<sup>3</sup>



### Tools and Tactics

- ➔ **When communicating about the change, highlight the potential benefits**, rather than focusing on what has been done in the past.
- ➔ **Present the status quo as one of several options for the future**, along with any proposed changes; help people see that not making a change is also a choice.

<sup>1</sup> Samuelson, W., & Zeckhauser, R. (1988). Status Quo Bias in Decision Making. *Journal of Risk and Uncertainty*, 1(1), 7-59.

<sup>2</sup> Thaler, R. H. (1999). Mental Accounting Matters. *Journal of Behavioral Decision Making*, 12(3), 183-206

<sup>3</sup> Ellsberg, D. (1961). Risk, Ambiguity, and the Savage Axioms. *The Quarterly Journal of Economics*, 643-669.

## 2

## Set a goal and get on the same page

When implementing complex organizational changes, diverse groups of people across different departments and roles need to work together toward the same goal. But even when people are motivated to collaborate and think they're communicating effectively, their visions of the end goal don't always match up.

One reason this communication failure happens is that different people have different **mental models**, or internal beliefs about how things work. Our mental models develop from our past experiences, which means they are not the same for everyone. We then use our individual mental models to determine what to do with new information. This explains how people can receive the exact same directive ("ensure every student has a dedicated academic adviser") and yet seek to implement it differently (one person might imagine that these advisers reach out proactively to all of their advisees, while another might see the advisers as being on call and available if a student reaches out for assistance).

People often aren't consciously aware of their own mental models, which makes it hard to quickly check if their understanding is aligned with someone else's. One reason this self-awareness is hard is that **confirmation bias** can lead people to cherry-pick new information that supports their beliefs, and to unwittingly discard contradicting evidence.

School leaders should therefore acknowledge that people working on the change initiative may understand the issue, or the work to be done, in different ways—and make an effort to get everyone on the same page early in the change process.



### Behavioral Principles

#### Mental models

Deeply held beliefs, based on past experiences or passed on from others for example, that guide the processing of new information.<sup>4</sup>

#### Confirmation bias

The seeking or interpreting of evidence in ways that are partial to existing beliefs, expectations, or a hypothesis in hand.<sup>5</sup>



### Tools and Tactics

- ➔ **Hold a visioning exercise** where everyone is asked to lay out how they see the end goal with a high level of detail.
- ➔ **Assign a single person to be in charge**, so that it's clear which interpretation of the goal is the one everyone should be working toward

<sup>4</sup> Brewer, W. F., & Nakamura, G. V. (1984). The Nature and Functions of Schemas. *Center for the Study of Reading Technical Report*; no. 325.

<sup>5</sup> Nickerson, R. S. (1998). Confirmation Bias: A Ubiquitous Phenomenon in Many Guises. *Review of General Psychology*, 2(2), 175-220.

# 3

## Connect identities to the tasks

Over time, we develop narratives about ourselves: what we value, what we're good at, how we handle problems. These narratives then influence our future behavior through a process called **identity-based motivation**. We make decisions that we feel are consistent with our identities, even when it's not always beneficial. For example, an injured athlete may dismiss a doctor's order to rest because they see themselves as someone who perseveres through discomfort.

These sorts of narratives can be just as influential in our work environments. People have an understanding of what their role is and what they should be doing, and they may be resistant to perceived challenges to that identity—especially if they've been in their role for a long time. This resistance is an attempt to avoid **cognitive dissonance**, or the discomfort experienced when new information contradicts previously held beliefs or values.

In any major change effort, many people will need to take on new roles, which they may resist. Fortunately, however, identities are malleable, as are interpretations of new situations. School leaders should recognize that asking staff to take on new responsibilities may be challenging, especially when people identify strongly with their previous positions—and then work to address any concerns at the outset.



### Behavioral Principles

#### Identity-based motivation

The process of choosing future actions based on alignment or reinforcement with people's identities.<sup>6</sup>

#### Cognitive dissonance

The feeling of stress that results from having multiple beliefs, ideas, or values that are inconsistent with each other.<sup>7</sup>



### Tools and Tactics

- ➔ **Be clear about what future roles and responsibilities will look like;** ambiguity is often more uncomfortable than change.
- ➔ **Highlight continuity between established identities and new responsibilities** and help staff see how new tasks fit into the broader role they are already playing.
- ➔ **Collaboratively work to update the school or department mission statements** to include the goal of the new change initiative.

<sup>6</sup> Oyserman, D., Fryberg, S. A., & Yoder, N. (2007). Identity-Based Motivation and Health. *Journal of Personality and Social Psychology*, 93(6), 1011.

<sup>7</sup> Festinger, L. (1962). Cognitive Dissonance. *Scientific American*, 207(4), 93-106.



# 4

## Work together from the start

People often think that others support (or fail to support) organizational decisions based on whether they align with their own interests. But actually, whether or not people perceive the decision-making process itself to be fair can matter just as much as the outcome. This prioritization of fair process is called **procedural justice**. When people feel included in the decision-making process, they tend to be more supportive of the final results.

It can be tempting for school leaders to announce final decisions rather than proposed changes. Doing so is efficient and resolves many of the challenges that ambiguity presents. However, school leaders may overestimate the extent to which others will agree with their decisions, harboring a **false sense of consensus** when in fact people are not on the same page.

School leaders should instead ensure staff have a meaningful opportunity to weigh in on the issue at hand. And leaders should convey a genuine openness to ideas generated in these discussions; if faculty or staff take the time to contribute and then feel ignored, they may be even less receptive to the proposed change. Not only will including people who will be affected by the change into the decision-making process make it more likely they will ultimately support the change, but incorporating diverse perspectives will lead to a fundamentally better solution.



### Behavioral Principles

#### Procedural justice

An approach that prioritizes fairness of process, rather than only fairness of outcomes.<sup>8</sup>

#### False consensus effect

The tendency to overestimate the degree to which others share your beliefs, values, opinions and behaviors.<sup>9</sup>



### Tools and Tactics

#### → Create channels for providing meaningful input

(collaborative design sessions, forums, anonymous reviews, etc.). Solicit feedback from and include people at all levels of implementation, from leadership to administrators who will be directly affected by the change.

#### → Once the initiative has launched, **regularly solicit feedback** from people responsible for carrying out new processes—and be prepared to address their concerns.

<sup>8</sup> Tyler, T. R. (2007). Court Review: Volume 44, Issue 1/2-Procedural Justice and the Courts. *Court Review: The Journal of the American Judges Association*, 217.

<sup>9</sup> Ross, L., Greene, D., & House, P. (1977). The "False Consensus Effect": An Egocentric Bias in Social Perception and Attribution Processes. *Journal of Experimental Social Psychology*, 13(3), 279-301.



# **MANAGING IMPLEMENTATION**



## 5

***Simplify, simplify, simplify***

Sometimes the smallest hassles can get in the way of our taking actions or making changes. When little things like getting a signature, navigating a new technology, or making it through a multi-step application prevent people from taking actions (even though the benefits of such actions are clear and substantial) they're called ***hassle factors***. Because they're seemingly trivial, it's easy to overlook potential hassle factors when implementing new processes. But in practice, when people encounter hassles, they're more likely to ***procrastinate*** or even give up entirely.

One well-known study showed how hassle factors can stand in the way of students and their much-needed financial aid. It found that simply pre-populating fields on the FAFSA and offering help with the form's completion boosted college enrollment rates by 29%.<sup>10</sup> Most students would probably agree that the benefits of college (and of financial aid!) are worth filling out a form, but the hassles associated with completing the FAFSA were having an outsized impact.

School leaders should therefore work to identify any hassles that might inadvertently prevent their colleagues from bringing the desired change to fruition—and take whatever steps they can to remove these hassles.

***Behavioral Principles******Hassle factors***

Small or large inconveniences and/or obstacles that obstruct behavior.<sup>11</sup>

***Procrastination***

The voluntary delay of an intended action due to overestimation of future self-control, and underestimation of the cumulative cost of repeated procrastination.<sup>12</sup>

***Tools and Tactics***

- ➔ **Simplify tasks as much as possible;** look for opportunities to remove unnecessary steps or make things easier.
- ➔ **Observe people** engaging in new processes to see where they're getting stuck, and be prepared to make modifications as needed.

<sup>10</sup> Bettinger, E. P., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment. *The Quarterly Journal of Economics*, 127(3), 1205-1242.

<sup>11</sup> Bertrand, M., Mullainathan, S., & Shafir, E. (2006). Behavioral Economics and Marketing in Aid of Decision Making Among the Poor. *Journal of Public Policy & Marketing*, 25(1), 8-23.

<sup>12</sup> Ariely, D., & Wertenbroch, K. (2002). Procrastination, Deadlines, and Performance: Self-Control by Precommitment. *Psychological Science*, 13(3), 219-224.



## 6

**Build habits to make new tasks stick**

Over the course of a day, we all remember to do countless different tasks without much effort; when we get to the office in the morning, for example, we check our email, open our calendars, even water our plants... all on autopilot. And yet, fundamental **limits on our attention** mean that we can't remember everything—and one-off or new tasks are often the first to be forgotten. When a task becomes a **habit**, it becomes automatic; there's no moment to forget or get off track.

Habits are cued by the context—small elements of the physical environment, other habitual actions, or even our emotional state. The **fresh start effect** describes how any change to a previously stable context can help people reset and create new habits. A good time to build new habits is therefore when there's a significant "break" in our routines—such as at the start of a new semester or academic year. Fresh starts can also be intentionally created from smaller moments, like returning from vacation or even just the start of a new week or month.

When people need to take on new tasks, they should consider both new habits that need to be formed and also old habits that must be broken. For example, if advisers are adopting a digital case management system, they may need to remember to type notes electronically; they may also need to break the habit of writing notes on paper and filing them in their desk drawers. School leaders overseeing change initiatives should identify the behaviors that must take root if the change is going to stick—and think about the most effective ways to foster the adoption of these new practices.

**Behavioral Principles****Limited attention**

The fact that, at any given time, we have a finite amount of attention available.<sup>13</sup>

**Habit**

A routine of behavior that is repeated regularly and tends to occur automatically after exposure to a specific cue or trigger.<sup>14</sup>

**Fresh start effect**

People are more likely to pursue goals immediately following salient temporal landmarks.<sup>15</sup>

**Tools and Tactics**

- ➔ **Automate as much as possible**, so that people don't need to explicitly remember anything.
- ➔ **Integrate new processes within existing routines** so that there are clear cues reminding people to do the new task. Cues work best when they're encountered at the right time, are clear and obvious, and are actionable.
- ➔ **Time the roll out of changes** for when people are already encountering other breaks in their routines, like the start of a new semester.

<sup>13</sup> Pashler, H. E. (1999). *The Psychology of Attention*. MIT press.

<sup>14</sup> Wood, W., & Rünger, D. (2016). Psychology of Habit. *Annual Review of Psychology*, 67.

<sup>15</sup> Dai, H., Milkman, K. L., & Riis, J. (2014). The Fresh Start Effect: Temporal Landmarks Motivate Aspirational Behavior. *Management Science*, 60(10), 2563-2582.



## 7

## Expect delays and build in buffer

No matter how much experience we have, most of us will systematically underestimate how long a new project will take. This judgment error is called **planning fallacy**, and it's especially problematic when tasks are long-term, complex, or ambiguous—as are many large-scale change initiatives.

Planning fallacy is largely driven by our failure to list out steps and requirements in sufficient detail, but our own optimism and **overconfidence** can exacerbate these errors. Notably, people are better at estimating how long it will take someone else to do a task than how long they'll take themselves. And planning fallacy presents challenges not only because delays can get projects off track, but also because people end up fixating on the delays, tarnishing the whole endeavor with a sense of failure. Unfortunately, our **negativity bias** means that negative events (like missed deadlines) tend to be more salient than successes.

School leaders should work to mitigate planning fallacy by asking neutral third parties to give feedback on plans, by imagining how long things will take in the worst case scenario, and by adding in even more slack to their schedule. When leaders are prepared to handle unexpected delays, people are more likely to stay engaged and supportive.



### Behavioral Principles

**Planning fallacy**

The tendency to underestimate the time, money, or effort required to complete a task.<sup>16</sup>

**Overconfidence**

The tendency for a person's subjective confidence in his or her judgements to be reliably greater than the objective accuracy of those judgements.<sup>17</sup>

**Negativity bias**

The tendency for negative information to have a greater impact on memory than equally-intense neutral or positive information.<sup>18</sup>



### Tools and Tactics

- ➔ **Break big, long-term projects into smaller steps** with interim deadlines.
- ➔ **Write out what needs to happen in as much detail as possible.** The more specific this list is, the easier it will be to accurately estimate how much time things will take.
- ➔ **Add slack to your schedule (and budget)—more than you think you'll need.** When things run behind schedule, you'll be prepared.

<sup>16</sup> Buehler, R., Griffin, D., & Ross, M. (1994). Exploring the "Planning Fallacy": Why People Underestimate their Task Completion Times. *Journal of Personality and Social Psychology*, 67(3), 366.

<sup>17</sup> Dunning, D., Heath, C., & Suls, J. M. (2004). Flawed Self-Assessment: Implications for Health, Education, and the Workplace. *Psychological Science in the Public Interest*, 5(3), 69–106.

<sup>18</sup> Ito, T. A., Larsen, J. T., Smith, N. K., & Cacioppo, J. T. (1998). Negative Information Weighs More Heavily on the Brain: The Negativity Bias in Evaluative Categorizations. *Journal of Personality and Social Psychology*, 75(4), 887.



## 8

**Leave time for integration**

Sometimes, big projects look like they're going smoothly right up until the last moment. Tasks have been delegated, deadlines have been met, feedback has been incorporated—and yet fitting all the workstreams back together is a lot harder than anticipated. Imagine a team planning a major conference that decides to split up responsibilities: one person handles the agenda, another secures lodging for speakers and guests, another handles catering. Everyone proceeds productively and is proud of their efficient approach to planning—until it takes hours to reconcile the hotel's check out requirements with the time of the keynote luncheon.

This tendency to leave insufficient time and attention to merge the efforts of different teams is called **coordination neglect**. People tend to focus on their individual components of the project at the expense of the bigger picture, and they often do not think about the time and effort required to consolidate different aspects of the work. One reason teams may struggle to clearly communicate with each other is referred to as the **curse of knowledge**, or when we inadvertently assume that other people already have the same information we ourselves have. Teams may be so familiar with their own processes that they forget to explain important details.

In managing large-scale change initiatives, school leaders should leave enough time, and provide enough support, for teams to effectively coordinate the different parts of the project. Such coordination may be one of the last steps in a change effort, but it is certainly not the least important.

**Behavioral Principles****Coordination neglect**

The tendency to devote insufficient attention to task component integration.<sup>19</sup>

**Curse of knowledge**

When someone mistakenly believes that other people possess the same knowledge that they do themselves.<sup>20</sup>

**Tools and Tactics**

- ➔ **Ensure frequent and regular communication** between different teams.
- ➔ **Budget extra time in the schedule** anytime you need to integrate the work of multiple groups working on the project.
- ➔ **Put one person in charge of the overall effort** so that someone can think just about coordination without being bogged down with specific implementation tasks.

<sup>19</sup> Heath, C., & Staudenmayer, N. (2000). Coordination Neglect: How Lay Theories of Organizing Complicate Coordination in Organizations. *Research in Organizational Behavior*, 22, 153-191.

<sup>20</sup> Birch, S. A., & Bloom, P. (2007). The Curse of Knowledge in Reasoning About False Beliefs. *Psychological Science*, 18(5), 382-386.

