

PATHWAYS-TO-SUCCESS TRAIN- THE-TRAINER MANUAL

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OVERVIEW: AIM AND OUTLINE

This *Pathways to Success Train-the-Trainer Manual (TtT)* teaches you to teach others to implement the *Pathways to Success (Pathways)* with fidelity. The *Pathways* program is a short social-psychological intervention designed to change student “mindsets”, the way that they think about their futures and interpret difficulties along the way. *TtT* is intended for experienced *Pathways* teachers to train other teachers to deliver the *Pathways* curriculum with skill and fidelity. Successful training means that the average teacher will: (a) deliver activities as intended with high quality, (b) have students who respond and experience the curriculum as intended, and (c) have students who experience each session’s take home point as inherent, obvious, and emerging organically from the activities as student-generated insight rather than as a teacher-driven opinion. To translate identity-based motivation into intervention, *Pathways* uses insights from social and cognitive psychology as well as best preventive intervention practices.

This train-the-trainer manual provides detail as to how experienced *Pathways* teachers should go about training other teachers. A key feature of the training is that teachers actually experience (not just watch and talk about) the intervention as participants, actively learn the rationale and empirical evidence for each element of *Pathways* and practice delivering *Pathways* with structured feedback. Training led by teachers who have delivered the intervention provides teachers the opportunity to gain valuable experience. We provide video and worksheets to structure active learning of the theory and rationale. Pointers for prepping for successful delivery of *Pathways* are presented as part of training and practice sessions.

AIM

The aim of this manual is to provide the tools experienced *Pathways* teachers need to train and support other teachers so that they can deliver the *Pathways* curriculum with high skill and fidelity.

TRAIN-THE-TRAINER MANUAL OUTLINE

This manual provides information experienced *Pathways* teachers need to train other teachers. Since one of the key elements of training teachers is guiding them through the *Pathways* intervention, this manual provides information to relevant to the theory and deliver of *Pathways*, as well as information about learning theory that is relevant to good training of teachers and good delivery of *Pathways*. The *Pathways* Train-The-Trainer manual includes four sections: introduction, rationale, building the toad and background, and training implementation.

<p>The <i>Train-the-Trainer Manual</i> should be used in combination with the other <i>Pathways</i> materials, which include:</p> <ul style="list-style-type: none"> • Implementation Manual • PowerPoint deck to use for implementation of each session • Session handouts (2 sets of copies for training) • <i>Pathways</i> website (http://www.pathwaysintervention.com/), which includes: <ul style="list-style-type: none"> ○ Video library showing session-by-session implementation ○ Video library with Dr. Oyserman describing the core identity-based motivation concepts ○ Video library with Dr. Oyserman describing the how <i>Pathways</i> works • Links to <i>Pathways</i> publications 	<p>How will this help me in training?</p> <p>The first three sections, entitled <i>Introduction</i>, <i>Rationale</i>, and <i>Building the Road and Background</i>, are designed to help you, the teacher trainer, gain additional insights into the <i>Pathways</i> intervention and the theory and research behind <i>Pathways</i>. The final section is entitled <i>Training Implementation</i> and provides the step-by-step information you need. The expectation is that you can use this knowledge during the <i>Training Implementation</i>. We include “how will this will help me in training” text boxes to insure your success and help you connect what you are learning to specific aspects of training. At each step along the way, needed PowerPoint deck, handouts, and video are provided.</p>
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- ***Introduction.*** This section provides an explanation of the problem that *Pathways* attempts to address, the way in which *Pathways* attempts to solve the problem, and overall structure of the *Pathways* teacher training.
- ***Rationale.*** This section explains the principles of identity-based motivation that make *Pathways* work.
- ***Setting the State and Background.*** This section highlights the cognitive and social psychological basis for *Pathways* design and delivery/
- ***Training Implementation,*** This section provides specific information about the train-the-trainer training, including what trainers will say and do during the training, information on the basic structure of each *Pathways* session, the take home point for each session, and pointers and pitfalls for each session.

INTRODUCTION

To successfully train teachers who are first implementing *Pathways*, it is important for teacher trainers to have a solid understanding of the *Pathways* intervention. Specifically, this *Introduction* provides you with an overview of (a) the problems and associated solutions that *Pathways* addresses and (b) an explanation of how you will help teachers understand the underlying *Pathways* concepts as part of the *Pathways* training.

THE PROBLEM

When engaging teachers in a professional development experience or considering implementing a new intervention, it is useful to highlight the “pain point” or problem that the professional development or intervention seeks to resolve. The “pain point” that *Pathways* addresses:

- **Reality falls short of promise.** The promise of education is that it is transformative, changing the trajectory of students’ lives by providing them not only with substantive knowledge but also with a platform to spread their wings and point their life in meaningful directions. Yet for all too many students, this promise remains unfulfilled. These students obtain too little benefit from their teachers and from schooling in general because they fail to see the connection between the content knowledge provided in the classroom and their own possibilities for the future.
- **Trying matters.** Sustained effort reduces risk of school failure, but adolescents report less effort and engagement with schoolwork than younger students do (Barber & Olsen, 2004; Roeser et al., 1999; Seidman et al., 1994). School failure is associated with increased risk of drug and alcohol use, and of becoming ‘off-track’ in other ways (e.g., involvement with crime and delinquency, becoming pregnant).
- **But students quit too soon.** Students quit trying in part because they misinterpret experienced ease and difficulty with schoolwork as meaning that schoolwork is either trivial or impossible and hence not worthwhile or ‘not for me’ (Elmore & Oyserman, 2016; Oyserman, 2015; Smith & Oyserman, 2015). This risk is particularly high for low-income and minority adolescents who are stereotyped as less academically able (Fiske, Cuddy, & Glick, 2007). If they come to mind, these stereotypes put low income and minority adolescents at risk for effort-

How will this help me in training?

The *Problem* and *Solution* sections will help you deliver with fidelity in Day 1 and help you discuss why teachers should implement *Pathways* in Day 2, discussing the pain points teachers face, and how *Pathways* helps resolve them.

undermining interpretations of experienced difficulty (Oyserman & Fisher, 2017; Oyserman & Lewis, 2017).

- **Instead of interpreting difficulty as importance.** Schoolwork, and indeed, anything meaningful, is often experienced as difficult, and failures along the way are part of the process (Oyserman, 2015). Interpreting experienced difficulty as a signal of importance and experienced ease as a signal of possibility increases students' experience of schoolwork as an identity-congruent, 'me' thing to do, and increases their engagement and experience of meaning and purpose. The question we address in *Pathways* is how to set conditions for these productive interpretations of experienced ease and difficulty.

THE SOLUTION

The solution we are suggesting is to use *Pathways*. *Pathways* uses Identity Based Motivation (IBM) Theory in a whole-classroom universal intervention that provides students the skills and mindsets they need to successfully engage with school and to set themselves on their path to adulthood. Teacher training focuses on providing teachers the skills to support shifting student mindset in a way that avoids common pitfalls that occur when attempting to change mindsets.

- **Identity-based motivation (IBM) theory** predicts, and research shows, that students will keep trying and succeed more if they interpret their ease and difficulty with schoolwork as meaning that schoolwork is worthwhile and 'for me' (Alenei, Lewis, & Oyserman, 2016; Elmore, Oyserman, Smith & Novin, 2016; Fisher & Oyserman, 2017; Oyserman, 2015; Smith & Oyserman, 2015). Students are more likely to interpret difficulty as a signal of value ("this is important for me") if they experience schoolwork as identity-congruent – a "me" thing to do (Oyserman, Destin, & Novin, 2015). They are more likely to engage with schoolwork if their current and adult future selves feel connected (Nurra & Oyserman, in press). Identities are not fixed but dynamically created in context. One way to create a connection between current and adult future selves is to use a journey metaphor (Landau, Oyserman, Keefer, & Smith, 2014), which is used throughout the *Pathways* intervention.
- ***Pathways-to-Success active ingredients.*** *Pathways* helps students see their adult futures as connected to the right now of school and to see failures and difficulties along the way as normal parts of an important process --becoming an adult. The *Pathways* intervention does this by focusing on three active ingredients that reoccur throughout the 12 sessions of *Pathways*. The active ingredients are:
 - *Future self:* Making next year and adult future "me" feel connected to right now.
 - *Relevant strategies:* Making now seem the time to start and strategies to get going feel like "me" things to do.

- *Productive interpretation of experienced difficulty*: Framing experienced difficulty as a signal that a task is important, valuable and “for me” rather than impossible, having low odds and “not for me.”
- **Implementation matters**: People respond negatively to having their autonomy limited and having others tell them what to think or do (Chirkov & Ryan, 2001; Grandpre et al., 2003; Miller et al., 2006; Steinberg & Silverberg, 1986). People are likely to interpret experienced difficulty as meaning that the odds of success are low, that this is not ‘for me’ (Fisher & Oyserman, 2017). So the intervention cannot feel like a heavy-handed influence attempt and activities should be set up to feel easy to do. The *Pathways Implementation Manual* and associated activities were carefully designed so that the students feel as though they can do this. Thus, it is important to implement *Pathways* the way in which it is designed, and that teachers are practiced enough in each session, so that students walk away with the feeling “that made sense,” “this must be true.”

POTENTIAL ADVANTAGES FOR SCHOOLS

The *Pathways* intervention is designed to: (1) support teachers in helping students connect what they do in school now to their next year and adult possible selves (2) Identify and implement strategies that they can take now to help them move toward desired and away from undesired adult possible selves. And (3) Interpret experienced difficulty as implying importance (“this is important to me” and not impossibility (“this is impossible for me”). These skills and mindsets are related to important outcomes for students, such as improved GPA, increased attendance, and decreased negative behaviors. Research has identified that *Pathways* has potential advantages, but why should you and your teachers implement in your school and with your middle school students?

How will this help me in training?

The *Potential Advantages for Schools* section will help you on Day 1 as you introduce *Pathways* and discuss why teachers should engage in the intervention. This will also help with Day 2 when you discuss logistics.

Why Teachers and Why School?

Pathways can and has been successfully delivered in multiple settings, including in classrooms with teachers, in classrooms with outside trainers, and during afterschool programs. Although it is not that teachers are the only way to deliver the powerful messages of *Pathways*, there are a number of benefits of having teachers lead *Pathways* in their own classrooms:

- Teachers have a yearlong relationship with their students.
- Teachers can connect the language and insights from *Pathways* seamlessly into other aspects of teaching and learning.

- Students can use *Pathways* concepts and apply *Pathways* insights in their daily school routine with their classmates and teachers without explaining themselves.
- When students experience *Pathways* with classmates in their regular classroom, they understand that *Pathways* is relevant to school. This is important given that change in one context rarely carries over to change in other contexts. Failure to generalize (take insights from one setting to another) is a huge issue for many interventions. For example, if students engaged in *Pathways* in a community center, they might have a more difficult time generalizing the *Pathways* concepts to a new setting (i.e., school).

Why Middle School?

The identity-based motivation concepts are relevant across a large age span. The empirical evidence supporting the predictions of identity-based motivation come from children as young as nine years of age through middle school, high school, the college years and adulthood. However, the adolescent years are a peak time of speculating about one's future self. This is especially true for the years in which adolescents move toward emancipation – during the span between 16 and 21 years of age (Abram, Picard, Navarro, & Piolino, 2014). Choices made prior to age 16 are enormously consequential. Thus, middle school is particularly powerful if *Pathways* can be delivered as students begin to imagine their high school years, which is why *Pathways* is usually delivered in the fall of the year prior to high school.

Why Pathways: Teacher Testimonials

Teachers who have engaged in the *Pathways* training and implemented *Pathways* in their classrooms have provided testimonials about the benefits of the intervention with their teaching and with their students. Some examples of what teachers have stated about *Pathways* include:

- The skills you learn in *Pathways* are transferrable to other aspects of your teaching. At the end of *Pathways* training that you will start seeing your teaching in a different way.
 - *Pathways* provides you and your students a common skill set to engage with difficulties, laying the groundwork for more classroom engagement and fewer classroom management problems.
 - *Pathways* makes you a better teacher, providing new and different ways to engage your students and build relationships with them.
- *Pathways* helps students get going in the first six weeks of the school year, a critical time which can be a difficult transition for students.

- *Pathways* helps you set up your school year, providing a language students can grasp and we can use all year.
- *Pathways* is a Tier 1 intervention that everyone gets and provides something all the 8th graders can relate to.
 - *Pathways* language helps students grasp how school now connects to their far future selves and gives school meaning.
 - *Pathways* helps middle school students look to the future and high school, providing concrete tools to help students get ready for high school whether they got into the high school they wanted or not.

DEEP STRUCTURE OF THE PATHWAYS INTERVENTION

Whether in the train-the-trainer context or in the classroom context, teaching is an influence attempt that requires that content be appropriately scaffolded to facilitate learning. To use *Pathways* successfully teachers need to have clear understanding of the *Pathways* concepts and know how to engage students in understanding and applying *Pathways* concepts. Comfort with identity-based motivation theory and clear understanding of the social and cognitive psychological rationale for *Pathways* structure is critical to both training teachers and to delivering *Pathways* as a teacher.

How will this help me in training?

The *Deep Structure* section will help you on Day 2 when you discuss “Guidelines and Tips” with teachers.

Teaching is an Influence Attempt, It Can Fall Flat

Teaching can fall flat if students do not engage and can even backfire if students actively disengage or counter argue. The challenge is that students need to experience the classroom setting and school generally as a place in which something valuable happens if they engage deeply. But if students feel coerced in the classroom setting, they may disengage or even actively counter argue the messages teachers are attempting to transmit.

Each part of the manual addresses this challenge: The *Rationale* and *Building the Road* sections help you give teachers tools to succeed in their influence attempt and to prevent falling flat by focusing on the relevant social science about social influence. The *Training Implementation* section supports you in providing teachers the necessary tools and knowledge to implement *Pathways* with fidelity and provide suggestions on how to support student engagement during the *Pathways* intervention.

Teachers Transmit Knowledge and Help Their Students Generate Knowledge

Teaching involves passing on content knowledge and helping students generate knowledge. That is, teaching is not just telling students content and having them memorize it but having students engage with material and helping them discover the important properties. In your role as a coach in a “train-the-trainer” model, your job is to teach teachers how to intervene in ways that bolster rather than undermine students’ sense that they have ownership over the process. Doing so requires that you model this behavior in the ways in which you train teachers. Like student participants in *Pathways*, the teachers you train also have to build their own competence.

Teaching can backfire or fall flat if teachers do not have in-depth understanding of relevant content needed to address novel questions or situations and so cannot properly scaffold new concepts. Teachers may also fail to scaffold new concepts properly if they do not have an understanding of how sessions build on one another and how student understanding emerges through

Each part of this manual addresses these challenges: The *Rationale* section communicates the core theory (identity-based motivation theory) and supporting evidence, the *Building the Road* section communicates core cognitive and social psychological insights about how people make meaning in their everyday lives. The *Training Implementation* section aims lays out how trainers should train teachers.

TRAINING OUTLINE

This manual provides the tools experienced *Pathways* teachers need to train and support other teachers so that they can deliver the *Pathways* curriculum with high skill and fidelity. These tools will guide you as you implement the *Training Implementation* with your cohort of teachers. Briefly, you will be supporting in learning:

How will this help me in training?

The *Training Outline* section will help you as you prepare for *Pathways* training. This section provides an overview of how you will engage teachers in the training.

- ***Pathways’* theoretical rationale** (identity-based motivation theory) and supporting evidence for the theory and the intervention.
- **Social and cognitive psychology** knowledge undergirding how to influence and scaffold knowledge generation in students.
- **A clear grasp** of the *Pathways* intervention.
- **A framework** for constructive structured feedback on *Pathways* implementation to support teacher success based on the criteria for implementation fidelity.

This manual provides the knowledge, tools, and resources for experienced *Pathways* teachers to successfully train a new cohort of *Pathways* teachers. **Successful training** means that the average teacher will be able to:

- **Deliver activities** as intended and have students who respond as intended.

- **Implement with high quality** so that instructions are clear and each take-home point feels inherent, obvious, and emerging organically from the activities as a student-generated insight rather than as a teacher-driven opinion. To support this, we operationalized what high quality looks like for each session of *Pathways*.
- **Insure “fidelity of receipt”** which means that at the end of *Pathways*, students will be confident that they can use tools and will have internalized the core take-home point.

Training involves three parts that can be called what, why, and how: (1) What: the experience of participating in *Pathways*, (2) Why: learning the theory, rationale, and specific purpose and take away points for each session and activity, and (3) How: learning how to present each session fluently and at high quality.

The What

Teachers actually experience *Pathways* as participants. Hence, they know what *Pathways* feels like from the inside. This first part of training involves delivering *Pathways* with high fidelity so that teachers have a mental model of what their students’ will experience. The *Pathways Implementation Manual* and materials support this task. This first step is critical for two reasons. First, it provides a concretization that is necessary to get a feel for pace and how it feels to experience *Pathways* one’s self – not addressed to others. Second, actually experiencing how it feels to be a participant helps teachers appreciate the power of *Pathways* when delivered with fidelity. Teacher trainers will predominately use the *Pathways to Success Implementation Manual* during this component of the training.

The Why

Teachers learn the theoretical rationale and empirical evidence for each element of *Pathways* during the second part of the teacher training. *Pathways* program activities come from identity-based motivation theory, and the underlying structure of *Pathways* uses insights from social and cognitive psychology. The teachers will learn about identity-based motivation theory and related empirical support in the *Rationale* section of this manual. The teachers will learn about the social and cognitive psychology insights on which quality implementation is based. The *Building the Road* section of this manual scaffolds this learning process. The goal of this part of the training is that all teachers will develop insights into what identity-based motivation is and into how best to deliver the *Pathways* program. When teachers have a good understanding of the theory, they are more apt to deliver *Pathways* with fidelity. When teachers implement *Pathways* with fidelity, they are more likely to change students’ “mindsets”, the way that they think about the link between now and their futures and how they interpret difficulties along the way. To support teacher understanding of the “the way”, we provide video and worksheets so that teachers are actively learning the material presented

The How

The final day of teacher training involves teachers delivering sessions with structured feedback. Practice and structured feedback focuses on both adherence to activities and the extent to which instructions are clear and student participation is positively reinforced. In addition, feedback focuses on the way that the take home point of each session is highlighted using students' own words. This manual provides specific information on what teacher trainers should say and do during the teacher implementation and feedback components, including explanation of the basic structure and the take home point, pointers and pitfalls for each *Pathways* session.

RATIONALE: IDENTITY-BASED MOTIVATION

The *Rationale* section provides information about identify-based motivation (IBM), which is the theoretical framework that underlies the *Pathways to Success* program. Prior to discussing IBM, it is important to understand how identify-based motivation provides purpose and meaning within individual's lives.

PURPOSE, MEANING, AND TEMPORAL CONTINUITY

A key developmental task of adolescence is to create a sense of the adult one may become, in a way that fosters a sense of one's life as meaningful and purposeful (Ballard, Malin, Porter, Colby, & Damon, 2015; Crone & Dahl, 2012; Waytz, Hershfield, & Tamir, 2015). Indeed, people typically see their far-future selves as more like their 'true' selves than their current selves, in part because their future selves do not feel as limited and bogged down by current demands and circumstances (Lieberman & Trope, 2008). Even though we don't often think about it that way, there are four domains or areas in which adults find meaning and purpose.

How will this help me in training?

The *Purpose, Meaning, and Temporal Continuity*, and the *Identity Based Motivation* sections will help you deliver take home points with fidelity on Day 1 and help you discuss the empirical and theoretical components aspect of the training on Day 2 and help you provide high quality feedback on Day 3.

- **The domains of adulthood** – work and career, lifestyle, family and relationships, and community engagement differ in how deeply meaningful they are. That is, work is a way to have purpose and to meaningfully connect with others (family and relationships, community engagement) and not just a way to have material thing and lifestyles (Damon, Menon, & Bronk, 2003).
- **Temporal continuity.** However, creating a meaningful future adult self is not enough. Students need to experience a sense of temporal continuity – that their current and adult future selves are connected in some way, that current choices matter and influence what is possible for one's future self (Oyserman, Elmore, Smith, 2012). Otherwise, lofty future purposeful selves seem to require no current action. Failure to experience the future as relevant to now makes positive actions in the present less meaningful, and therefore breaking rules, escalating conflicts, and other negative present-focused action seem more reasonable.
- **We take this to heart!** *Pathways* sessions create a sense of imminence – that schoolwork matters because it is a step toward attaining adult possible selves.

Understanding Temporal Continuity in Context

- Consider an 8th grader who hopes to be a doctor or a hairdresser. She likely will study more right now if she sees school as the connector between 8th grade “me” and adult doctor or hairdresser “me” Students who imagine a future self may fail to take future-focused action. After all, adult “me” is in the distal future and is probabilistic, not certain, and may feel irrelevant to current choices.
- Students likely to benefit from imagining their adult future self if they experience their adult selves as linked to their current selves through school. Rather than requiring a specific relevant to a particular kind of adult career, schoolwork generally has meaning if school is the path from current “me” to adult “me”. The idea is that school success is not a goal in itself but a means to something purposeful. School now links to school later (high school, college, other training) not just to get grade and graduate college but as a means, to being able to make a living, which itself is a means to having a life of purpose – doing something of value and investing in family and social connections.
- This general idea of school as the path is useful and is not dependent on the particular “adult images” students have on their minds.

IDENTITY-BASED MOTIVATION

Identity-based motivation theory is a social psychological theory of motivation and goal pursuit (Oyserman, 2007; 2009a). Identity-based motivation theory explains the action-identity interface, with particular focus on why people often fail to act soon enough or persistently enough in pursuit of goals they have for themselves.

IBM predicts that people prefer to act (termed “action readiness”) and make sense of their experiences of ease and difficulty (termed “procedural readiness”) in ways that fit their identities – who they are now and might become in the future. These identities are not fixed. Instead, people are sensitively attuned to contextual cues as to which identities matter and what these identities imply (termed “dynamic construction”).

- **See it, be it?** People prefer to act and make sense of situations in identity-congruent ways – ways consistent with what “I” and people “like me” do. Identities feel stable but are actually flexibly tuned to the immediate situation. This is a design feature, not a flaw. Which identities come to mind and what these identities imply for behavior and hence for how experienced ease and difficulty engaging in this behavior is interpreted are a function of the situation

“**Identities**” are the traits and characteristics, social relationships, roles, and group memberships that define who a person is or might become. When identities focus on future possibilities, they are called *possible selves*. The combination of past, current, and future possible identities make up a sense of self (Oyserman, Elmore, & Smith, 2012; Oyserman, Lewis, Yan, Fisher, Horowitz, O’Donnell, 2017).

one is currently in (Oyserman, 2009a, 2009b). For example, if in context, difficulty means impossibility, student will understand difficulty imagining a next year or adult “possible self” as meaning that it is not for them.

- **IBM in *Pathways* and beyond:** Identity-based motivation theory is a general theory, not limited to students who are minority, low income, or in middle school. It predicts academic outcomes in other countries including China (Bi & Oyserman, 2015) and France (Nurra & Oyserman, in press) and among mostly white college students at the University of Michigan (Oyserman, Destin, & Novin, 2015; Smith & Oyserman, 2015) and California community college

Understanding IBM in Context

The question of whether or not to engage with schoolwork is less likely to arise at all if schoolwork feels identity-congruent, something that “I” or “we” do. Following identity-based motivation theory, if schoolwork feels like a step on the path toward expected and away from to-be-avoided (feared) next year possible selves, experienced difficulty with schoolwork will be energizing rather than demotivating (Oyserman, 2015). Working toward expected and away from to-be-avoided next year possible selves is more motivating if these next year possible selves come to mind and are experienced as connected to more distal adult possible selves, making current action feel purposeful and meaningful.

students (Aeleni, Lewis, & Oyserman, 2016). IBM effects are not limited to academics; for instance, it also influences healthy and unhealthy choices among adults (Lewis & Earl, in press; Oyserman, Fryberg, & Yoder, 2007; Oyserman & Fisher, in press).

Three Core Components of Identity-Based Motivation

There are three components of IBM, including dynamic construction, action readiness, and procedural readiness, which were briefly discussed above. Each component of IBM is activated throughout the 12 sessions and activities within the *Pathways* intervention.

Dynamic construction is the first component of identity-based motivation theory. This reflects that people’s understanding of who they are and might become is sensitive to momentary and chronic contextual cues. Identities can and do change across situations.

Action readiness is the second component of identity-based motivation theory. This reflects that action flows from identity. People feel more comfortable acting in ways that fit who they are. They prefer behaviors that feel consistent with what “I” or “we” -- people like “me” do. The reverse is also true, engaging in a behavior can imply an identity.

Procedural readiness is the third component of identity-based motivation theory. This reflects that meaning-making flows from identity. The identities that are currently on the

mind provide a lens within which to understand experience. Consider experienced difficulty, does difficulty mean that the odds are low, and hence “I” and “we” don’t really do this kind of thing? Or does difficulty mean that value is high, and hence this is worthwhile of “me” and “us”? Does experienced ease mean that the odds are high and hence that it is possible for “me” or “us” to succeed or that the task is trivial and “not worth my time”? The reverse is also true, interpreting experienced ease and difficulty in productive ways – if it is easy it is possible for “me” and if it is difficult it is important for “me” has implications for identity.

- **We take this to heart!** We used identity-based motivation theory to develop the activities in each *Pathways* session. The specific link from session to theory is explained in Section 3 of this manual. Activities focus on dynamic construction (creating next year and adult possible selves), action readiness (linking future self to current action), and procedural-readiness (providing a productive interpretation of what experienced difficulty means).

IBM EXAMPLE 1 *Identity in the classroom: Adult me.*

Question: *Does thinking about the distal future – the adult one might become – influence student’s current engagement with schoolwork and their grades?*

Consider the following experiment: Middle and high school students in France were randomly assigned to one of two groups. Each group saw two circles, one labeled ‘me now’ and the other labeled ‘adult me.’ Each group was then asked about what they expected to be like as an adult and wrote a response. The *only* difference between the groups was that for one group the two circles were presented as overlapping

IBM EXAMPLE 2 *Identity in the classroom.*

Question: *Am I on a journey or is the future a different box?*

Consider the following set of experiments: American students were randomly assigned to groups. Each group was instructed to write about their possible selves for the next few years (Landau, Oyserman, Keefer, & Smith, 2014). One group wrote on a page with a picture of a path, another group wrote on a blank page, and a third group wrote on a page with pictures of boxes (or houses, depending on the experiment). Then, depending on the experiment, the experimenter asked students to complete a task. For example, students were (1) asked how certain they were that they knew how to get to the future they just described, (2) gave students some mental math to do, (3) students were offered the chance to sign up for a study skills workshop, or (4) the experimenter simply collected grades on the next quiz the students took.

Results: In each experiment, imagining one’s possible future self improved engagement with schoolwork only if the way students’ imagined their future was linked to action – making progress on a journey, rather than no clear implication that action was needed (the blank page or the future in a ‘box’ or ‘house.’

Implications: These experiments show dynamic construction and action-readiness – what a future possible self meant depended on how the situation was set up, but once it came to mind, students acted in ways that fit the identity – working harder in school if they were on a journey to their future possible selves.

IBM EXAMPLE 3 *Identity in the classroom: Gender.*

Consider the following experiment: Low-income American middle school students were randomly assigned to interpret one of four graphs (Elmore & Oyserman, 2012). The graphs either showed (accurate) Census information about earnings in their state, or about high school graduation rates in their state. For half of students, graphs broke down information by gender. Thus, boys and girls either saw that men succeed (they earn more money) or that women succeed (they graduate high school more). For the other half of students, gender comparison was omitted.

Results: The motivational consequence of seeing the graph depended on whether or not the graph implied that people like ‘me’ succeed. Boys did worse than girls except in the ‘men succeed’ condition in which they saw that men earn more money. Boys in this condition generated more academic and career-oriented possible identities and worked just as hard as girls on math problems. Interestingly, the intervention that improved the outcomes for boys did not undermine outcomes for girls.

Implications: As illustrated by these results, once being male and earning an income came to mind in the context of school, what it meant to be a boy changed, boys acted differently, they worked harder at a difficult math problem. For girls, the link between being a girl and doing schoolwork identity

IBM EXAMPLE 4 *Identity in the classroom.*

Question: *If it is hard is it for me?*

Consider the following experiments: In each experiment, low-income American middle school students were randomly assigned to two groups, one group was guided to consider that experiencing difficulty with schoolwork might mean that succeeding at schoolwork was an important goal, worth their effort (“no pain, no gain”). The other group was guided to consider a different interpretation of what difficulty might mean – that succeeding at that schoolwork was unlikely for them.

Results: Simply considering what difficulty might mean influenced students’ subsequent performance on standardized tests of writing skill (Oyserman et al., 2017) and of fluid intelligence (Elmore et al., 2016). Indeed, students in the ‘difficulty-as-impossibility’ condition performed like students in a control condition not given any interpretation of their experienced difficulty with the task at hand. The opposite was true of the students in the ‘difficulty-as-importance condition,’ they outperformed both groups.

IBM EXAMPLE 5 *Identity in the classroom: Race-ethnicity and social class.*

Question: *What about other identities? Do race, gender and social class identities matter?*

Consider the following experiences: People may or may not chronically think about their racial identity, but they are certainly more likely to think about it in some contexts than in others. When an individual does think about their racial identity, what comes to mind is likely to matter for whether or not schoolwork feels like a “me” or “us” thing to do. Consider an African-American (Black) middle school student in a classroom. Once racial identity is on his mind, what does that identity imply for his behavior? On one hand, there is no fixed way to “be Black,” no correct way in which being Black connects to schoolwork, and no fixed way in which to interpret difficulty while doing schoolwork. “Being Black” might mean buckling down and doing your schoolwork in order to get the scholarship to go to college; it might mean chatting instead of focusing in class or cutting class to hang out with friends. Which way of “being Black” comes to mind is a function of chronic and momentary cues, which, once activated carry action- and procedural-readiness –a propensity to act and make sense of experiences in ways that fit what “being Black” is in the moment.

Depending on what being Black means in a particular context, the appropriate behavior might be to do schoolwork or not. If, in context, the “Black thing to do” is to skip homework, then the experienced difficulty associated with doing homework implies that one should go ahead and skip it, because skipping in that context would be to engage in identity-congruent behavior. If on the other hand, the “Black thing to do” in context is to do homework, then the same experienced difficulty associated with doing homework highlights that one is doing the right thing, since doing homework in that context is the identity-congruent behavior. Experienced difficulty while acting in the identity congruent way implies that success (doing homework) is important.

Evidence for this prediction comes from interventions that help students by creating a sense that people like them succeed in college, whether by like them is implied ‘people whose parents did not go to college’ (e.g., Bowman & Destin, 2016) or ‘African Americans (e.g. Walton & Cohen, 2011). The climate of success that these interventions focus on starts with setting up a worldview that ‘people like

IBM EXAMPLE 6: *Tying it all together, the Pathways to Success (formally known as School-to-Jobs intervention).*

Question: Examples 1 to 5 each focus on showing that small intervention can change how students see themselves, their readiness to act and make sense of their experienced difficulties in ways that enhance their school outcomes. However, what happens when we put all three components to together and test effects at the end of a school year (Oyserman, Terry, Bybee, 2002) and at the end of two school years (Oyserman, Bybee, Terry, 2006)?

Consider the following experiments: Students were 8th graders in Detroit public schools. Targeted schools for this experiment were in high poverty and high unemployment neighborhoods. Almost all students who participated were African American or Latino. Students were randomly assigned to either a control group who attended school as usual or to participate in the *Pathways* activities with a trainer who came to school for this purpose (Oyserman, Bybee, & Terry, 2006; Oyserman, Terry, & Bybee, 2002). Trainers were either university students (Oyserman et al., 2002) or people who lived in Detroit and had undergraduate degrees but not in education (Oyserman et al., 2006).

Results: Students in *Pathways* (then, *School-to-Jobs*) got better grades and had fewer unexcused absences according to their school records. Their high school teachers reported that they were more engaged with their classes and had fewer disciplinary problems. They also reported fewer symptoms of depression. Importantly, these positive changes were due to changes in identity-based motivation – dynamic construction of identity and action-readiness were measured by asking students to describe their possible future selves and strategies to get there.

Implications: Taken together, the results from the experiments in Examples 1-6 demonstrate that the active ingredients of IBM – in isolation and in combination – lead to important outcomes for students

BUILDING THE ROAD: USING INSIGHTS FROM SOCIAL AND COGNITIVE PSYCHOLOGY TO STRUCTURE PATHWAYS

You can think of Identity-based Motivation as the car, the vehicle you are driving to get to the destination of better outcomes for all your students. The *Building the Road* section focuses on the road you need to build for your car to work in your own terrain – your school, your classroom. The *Building the Road* section provides information about how social and cognitive psychology influence the structure and content of the *Pathways* intervention. Specifically, this section discusses the role of social interactions for students as they engage with *Pathways* concepts, the importance of experienced ease as the *Pathways* lessons progress from less to more difficult, the ways in which students react to an influence attempt, and the use of conceptual metaphors throughout the sessions. At the end of this section, we provide session pointers that will help teachers implement the *Pathways to Success* program.

PATHWAYS AS SOCIAL INTERACTIONS

The *Pathways* program leverages what social scientists have learned about social interactions and how those influence the way that students interact in activities and process information. Below, I describe the importance of how information is presented (thin slices), how social norms influence student behavior (social norms), how public commitment motivates students to act (public), and how students perceive their own skills (unskilled and unaware of it). For each of these components, I note the punchline, why you should pay attention, and how I incorporated this in *Pathways* program.

How will this help me in training?

The *Pathways as Social Interactions* section will help you delivery Pathways with high fidelity in Day 1. It will help you accurately present Guidelines and Tips in Day 2. It will support provision of high quality feedback to teachers to support their own high fidelity implementation in Day 3.

Thin Slices

- **The punchline:** The ability to form immediate impressions of others is a critical human skill, so important that groups of people tend to converge on the same snap judgments from very ‘thin slices’ of contact (as little as 30 seconds, Ambady & Rosenthal, 1992). Thus, **first impressions** actually do matter and are very difficult to undo.
- **Ignore this at your peril:** Research demonstrates the importance of snap judgments in the ratings teacher receive. End of semester teacher ratings (from their students or principals) at the end of the year can be predicted by the gut feeling of liking, trustworthiness and competence that outside observers accrue

from tiny snips (30 seconds or so rated by undergraduates who are not students in the rated class, Ambady & Rosenthal, 1993). In these studies, undergraduate judges rate three 10-second *silent* video clips of each K-12 teacher, one from the first 10 minutes, one from the last 10 minutes and one from the middle 10 minutes of the first lesson. These ratings (liking, trustworthiness, competence, effectiveness) are then correlated with the teacher's actual end of semester ratings. The finding is that an outsider watching small bits of the first class without sound can make a prediction that is significantly correlated with actual end-of-year evaluations by principals.

- These studies underscore how vital the first impression you make as a teacher is. It is critically important to be well prepared for the first Pathways session so that you can smoothly and fluently create a sense that Pathways is a place in which they will learn something, in which they will be heard and have some say, and at the same time, they will be cared for, that you have expertise in guiding the process.
- ***We take this to heart!*** The very important point here is that you should be well prepared, so well prepared that you can be calm, friendly, in charge and on target from the first moment. When you are the trainer, your teachers form an immediate gut feeling about you, whether you are competent, trustworthy, and likeable. The same is true when you are a teacher – your students form an immediate gut feeling about whether you are competent, trustworthy, and likeable. People care about these dimensions – there is no point in trying to learn from someone who is not knowledgeable (competent) and one should not trust the feedback from someone who is untrustworthy or generally unlikeable.

Social Norms

- ***The punchline:*** People care about what others do, what the “norm” is. Social norms can be descriptive – what “we do” as well as injunctive – what “we ought” to do. While both can matter, descriptive norms are more powerful. People are sensitive to cues about what descriptive social norms are, whether or not the norms are explicitly stated. Descriptive norms are “procedural readiness” part of identity-based motivation – the readiness to act as “we” do. There is a large body of evidence showing that even small cues about behavioral norms matter, influencing behavior, while the effects of prescriptive norms, what we “ought to do” is weaker.
- ***Ignore this at your peril:*** Because of this sensitivity to descriptive norms, interventions that fail to create descriptive “we do” norms or attempt to rely on injunctive “we ought” norms often fail or have the opposite of the intended effect.

For example, when a group is created for delinquent boys, this group ends up increasing rather than decreasing subsequent drug use (Dishion et al., 1999).

- ***We take this to heart!*** Pathways takes care to structure activities in a way that descriptive norms of engagement, caring, effort, and productive interpretation of difficulty emerge – “we do” care about school as the path to our future.

Public Commitment

- ***The punchline:*** People are more likely to actually do the things they commit to doing *publicly* as compared to the things they privately vow to do. They do this because they do not want to **lose face**. In fact, interventions to stop doing (quit smoking, quit unhealthy habits) and to start and continue doing (healthy eating, exercising, saving for retirement) work better when people publicly commit, for example by telling their friends about their plan, or by doing the activities with others. However, we still need to think about what we committed to. Without some private engagement, people are focused only on their public face and will be less likely to focus on their concerns and uncertainties.
 - In other words, it is as if people experience the following thought process as a result of a public commitment: “because I said so in public → I cannot lose face, so I better do it.” The literature also shows that public commitment only works if prior to saying something in public, people feel that they have actually considered it in private and freely made the commitment at the time.
- ***Ignore this at your peril:*** On the one hand, forcing students to publicly commit before they have a chance for private reflection will not produce the intended effect. Students will feel coerced. On the other hand, failing to have public commitment and focusing only on private reflection, takes away the chance for students to gain the motivational force that a public commitment provides.
- ***We take this to heart!*** Pathways delivery is in groups with classmates and is structured so that students engage in activities that help them to create and then vocalize. Activities focus on strengths, visions of one’s future self, strategies to get there, forks and obstacles along the way, and help students inoculate themselves from interpreting experienced difficulty as impossibility rather than importance. The interplay between the private (working on products) and public (sharing out) is carefully planned so that students both actively engage with themselves rather than start with a spotlight and then once they have engaged, public commitment occurs.

Unskilled and Unaware of It

- ***The punchline:*** People generally see themselves through rose-colored glasses; they tend to have overly positive views of their skills and abilities across an array of domains (Kruger & Dunning, 1999). This happens because it is hard to recognize what one does not yet know and this leads to inflated estimates of how well one is doing. Not knowing that one is unskilled means that one is not looking to improve. It also means that failure and negative feedback will be met with surprise and even anger—negative feedback is unexpected and might feel unfair.
- ***Ignore this at your peril:*** Unskilled and unaware is a human condition – it is equally true for students and for teachers. Teachers who are not doing well are unlikely to know it. This means two things. First, they will not automatically make efforts to improve themselves. Second, they will be surprised when you suggest that they need to improve. The same is true for students – that is why students rarely self-correct and start studying more or change to more effective learning strategies on their own and why they often believe that the problem was the test or the teacher.
- ***We take this to heart!*** You need to be very concrete and structured in giving feedback to your teachers during training or teachers will not be able to see that they need improvement, what is wrong, or how to fix it. You need to teach your teachers how to do this in two ways: by modeling this in training and by explaining the core principles so teachers understand themselves and their students better.

CREATING AN EXPERIENCE OF EASE

A key component of the *Pathways* program is to create a sense of ease for students, helping them process that the *Pathways* activities is “for me” and “I can do it.” To do this, *Pathways* session activities start easier and more clearly scaffolded and gradually become more difficult and more subtly teacher scaffolded across sessions. This is intentional, as the early experience of ease and clarity provides students a sense that “this is for me, I can do this” and later sessions provide students an increased depth of engagement once a norm of participation is created. In this section we articulate why experienced ease is incorporated into *Pathways*. Then we discuss how *Pathways* creates experienced ease in three ways: fun and action, moving from fantasy to action, and by using experience and flow as a means, not an end. In each section below, we describe the key components, as well as how we take this to heart and used this in *Pathways*.

How will this help me in training?

The *Pathways as Social Interactions* section will help you deliver with high fidelity in Day 1 and deliver the content of Day 2 (Empirical and

Experience Ease

Lay theories are everyday theories and cognitive knowledge structures that allow people to draw inferences and make predictions about themselves (Schwarz & Hippler, 1987) and their social world (Heider, 1958; Kruglanski, 1980; Ross, 1977). Of particular importance for *Pathways* implementation are lay theories about what experienced difficulty means.

- ***The punchline.*** People experience ease and difficulty in their everyday lives. They do not have to interpret these experiences but often do. The likely default interpretation of difficulty is: “If it feels difficult to think through, it is probably not true, if it is difficult for me, I disagree.” The likely default interpretation of ease is: “If it feels easy to think through, I probably agree, if it is easy for me, I am a genius ... whee! (I am probably good at it).”

That is, thinking involves both content (what is on one’s mind) and metacognitive experience (thinking about experienced ease and difficulty while thinking). People automatically and constantly use their experiences of ease and difficulty while thinking to make sense of their experiences. These common interpretations of experienced difficulty (not for me, not true) and experienced ease (for me, true) matter.

- ***Feeling wins.*** A large literature documents that when pitted against each other, *metacognitive judgment* (what experienced ease or difficulty feels like) overrides *content of thinking* except in a few specified circumstances in which the implications of metacognitive judgment are refuted. People make inferences based on their metacognitive experiences unless given reason not to, even if content and metacognitive experience might lead to different judgments (for reviews, Oppenheimer, 2008; Schwarz, 2015).
- ***Natural and spontaneous? Not really.*** The conclusions people draw from their feelings are based on everyday or “lay” theories of how things work. Though people seem unaware of this, what their metacognitive experienced ease or difficulty seems to imply is an interpretation drawn from these lay theories. These lay theories that can be either chronically or momentarily activated (Schwarz, 2015). Lay theories of what experienced ease and difficulty imply are often experienced as spontaneous as if they were “natural observations” of reality itself. This feeling that one is not interpreting experience with a theory is sometimes termed “naïve realism” (Griffin & Ross, 1991).
- ***We take this to heart!*** Each aspect of *Pathways* (the activities, instructions, materials, take-home points) can be delivered in a way that is experienced as easy

to students. That is, delivery is intended to work with rather than against students' lay theory: experienced ease is likely interpreted as implying that the take home points are true. Note that the experience of ease does not mean that the activities are all easy. In fact, as detailed in subsequent sections, the activities themselves were developed to form a progression from very easy to more difficult. The way for sessions to feel easy and true is for teachers to deliver activities with high fidelity, including both adherence to the manual and quality delivery --the way in which take home points are evoked. Though sessions feel easy when delivered well, quality delivery requires training and practice with the *Implementation Manual*, as detailed in this *Training Manual*.

WHAT FEELINGS MEAN

The following set of experiments by Daphna Oyserman, Stephanie Fryberg, and Nick Yoder (2007) helps to clarify how the lay theory that is on the mind influences the meaning people draw from their experiences of ease and difficulty. In these experiments, the question was whether the lay theory on people's mind supported or undermined their belief that healthy living habits were effective for them – would increase their longevity. The prediction was that once a difficulty means “impossible, not true for me” lay theory was on the mind, participants would be less likely to believe that healthy habits were effective for them. To test this prediction, participants were divided into three groups through random assignment. Two groups were experimental groups: One group got an easy to answer question and so was predicted to have an easy means “true and for me” lay theory on the mind that would carry over to the healthy habits questions that came next. The other group got a difficult to answer question and so was predicted to have a difficult means “not true and not for me” lay theory on the mind that would carry over to the healthy habits questions. The third group was the control group. Participants in this group did not have an initial easy or a difficult question as a jumping point; they just answered the healthy habits questions. This group was assumed to use whatever lay theory happened to be on the mind. As predicted, participants in the difficult question condition seem to have a “difficulty means impossible, not true for me” lay theory on their minds. They rated healthy living strategies as less effective than participants in the other conditions. Recall that identity-based motivation theory predicts that difficulty does not have to mean impossibility; it can also mean importance. Indeed, the researchers found that which version of the difficulty lay theory was on the mind mattered. All participants in the experienced difficulty condition rated the difficulty question as difficult, but whether that implied “impossible” or “important” varied. Participants who believed that their in-group did not engage in healthy habits understood their experienced difficulty using a “difficulty means impossibility” lay theory. They were less likely to rate healthy living strategies as

effective in improving longevity, reducing their motivation to engage in these strategies, and increasing their health fatalism.

Fun! Action!

- ***The punchline!*** School is not the most fun thing one can imagine doing. It is not designed to be, nor is fun necessary for all learning. But in order to be willing to engage in the executive functioning needed to pay attention, actively engage with new concepts, and follow directions even on non-favorite topics, students have to believe that it is worth the pain – that indeed there is no benefit from just doing what feels easiest --“no pain no gain.”
- ***We take this to heart!*** The way to reach that message (eventually) is to start by making *Pathways* activities fun and action-packed but at the same time for teachers to fluently deliver take home points so that students will not lose focus. Hence *Pathways* activities are carefully structured so that students are literally moved from one place to another in the room and are figuratively moved from one kind of activity to another so engagement is kept high.

Moving from Fantasy to Action (But NOT a Career Plan)

- ***The punchline!*** A large body of work on therapeutic intervention suggests that most people who have problems either never start (e.g., working out) or quit (e.g., smoking) after a single session even if they came because they wanted to change. In part that is because actually committing to change requires noticing a problem and committing to work on it. However, focusing on problems is unpleasant and raises the possibility that one cannot change. This is *experienced as difficult* and anxiety provoking.

For students, thinking about the far future is difficult and anxiety provoking if it requires doing something or committing to something right away. On the other hand, schoolwork only makes sense if linked to the far future.

- ***We take this to heart!*** To get out of this conundrum (that the far future can be anxiety provoking yet schoolwork needs to link to the far future), *Pathways* has a particular sequence. It does start with the far future but in a soft touch way, just images, nothing to commit to so as not to evoke anxiety. Sessions slowly shift from adult images to adult possible selves (possible because someone shows you the way – what to do or what not to do, how to do it, or how not to do it), from just imagining a future at all to starting to accept the idea of sequencing of a future, which includes choices (forks) and difficulties (roadblocks and ways around them). Then sessions help students realize they can take actions now and

only after that do sessions focus on actions to take now. The final sessions tackle the hard stuff more directly –experiencing difficulties and failures and coming up with back up plans to get around roadblocks. We do this first with puzzles, then with school, and finally putting the pieces together to get through high school and from high school to college.

The goal is not to end with a particular path to a particular career but to end with a sense that one’s present and future selves are connected through actions one takes now, that school is the path, choices matter, that experiencing difficulties and failures along the way is part of the path toward any important goal.

Experience and Flow as a Means, NOT an End

- ***The punchline!*** Experience matters because if things do not feel engaging, no learning can occur. A teacher’s job is to draw on learning science increase students’ productive engagement and learning.
- ***Intense experiences do not mean learning.*** Workshops, weekend retreats and other intense experiences often feel life changing and transformational but fail to translate into real world change. Of course the difference between an intervention that works and one that does not is not just one trick. That said, a large literature suggests that for an intervention to have an effect over time, its active ingredients have to be reactivated at later times when they might matter. This means that *Pathways* has to be intense enough to be an experience but spaced enough that students learn the core concepts and gain practice and fluency in retrieving and using the core concepts to make sense of their lives.
- ***Learning is not the same as ease.*** This is counter to intuition but true. People often try to learn by re-reading or underlining text. These strategies feel fluent and easy – a second read provides a sense of “I know this” and underlining provides a cue of “I know what is important” but these strategies can backfire because the feeling of ease is misinterpreted as knowing the material. That is why more active strategies that feel more difficult work better, as outlined next.
- ***Remembering requires forgetting.*** This is counter to intuition but true. Building retrieval cues in memory requires practice in actively pulling back from memory, noticing what is missing and targeting those elements. That active and more difficult process is the difference between underlining while reading and self-testing as you go, the difference between cramming before the exam and studying intermittently throughout the semester. While momentary retrieval is better when information is simply presented and repeated, actual learning and ability to use information is higher when studying is spaced over time and occurs in different formats, so that content must be repeatedly retrieved and relinked.

- ***Remembering makes the future seem possible.*** The function of memory retrieval extends beyond this mental reconstruction of past experiences; it also supports building mental representations of what might happen in the future (Buckner & Carroll, 2007). The same part of the brain that supports memory of the past supports simulations of future possibilities (Schacter, Addis, & Buckner, 2007). *In part because anything specific seems more real* Memories can be episodic (specific events) or just general knowledge (semantic). Practice in simulating a specific sequence of events, of seeing a specific episode of events as occurring in the future makes future events seem more certain and hence more necessary to prepare for.
- ***For students, a core problem is sense of purpose or meaning.*** Instead of falling into a trap of trying to make each lesson and activity connect to a specific future job or career, what educators need to focus on is the big picture, which is a link between right now and adulthood.

We take this to heart! *To create meaning, Pathways starts with the adult, far future and moves nearer. To facilitate remembering Pathways creates a structured way to practice linking from one session to the next, and creates multiple instantiations of the three active ingredients of identity-based motivation, translated into the context of school, the ingredients are: (1) Present and future selves are connected through actions one takes now. (2) School is the path and choices along the way matter. (3) Experiencing difficulties and failures along the way is part of the path toward any important goal.*

Active learning occurs in each session. First, students are rewarded for remembering what they did in the prior session (*self-testing*). Students have a chance to forget and relearn—they test themselves by saying what the last session was about. Second, students pre-test themselves by generating the definition of core concepts themselves. Third, students apply the defined concept in different ways each session. Fourth, activities link to students' own experiences without forcing. Fifth, the active ingredients as articulated in *Pathways*, are replayed in different guises across sessions. Since activities repeat the three ideas in different ways, students gain *deeper understanding* of the active ingredients across sessions.

Learning the three active ingredients in this way may seem inefficient and more difficult than simply telling students what the three active ingredients are. However, learning and cognitive psychologists describe this seeming inefficiency as a *desirable difficulty* because it improves learning and memory in the long run (Bjork & Bjork, 2011).

Practicing recall and linking the *Pathways* activities from prior sessions to current ones is fundamental to the core goal of constructing and mental simulations of adult future selves as linked to the current self through actions, through failures and setbacks along the way. The way that students get good at envisioning and reflecting on their adult future self goals is through practicing retrieving and linking their current and past self-relevant experiences within the new framework learned in *Pathways* (e.g., Martin-Ordas, Atance, & Louw, 2012).

REACTANCE AND BOOMERANG EFFECTS

Reactance is a negative response to influence attempts that *feel coercive*. People can respond to influence attempts by doing what was asked, ignoring the influence attempt, or doing the opposite of the influence attempt. They are more likely to do the opposite if they feel that the influence attempt was heavy handed or coercive. When influence attempts feel coercive, people often actively counter-argue so that they end up doing and believing less of what the influencer wanted them to believe and doing and believing more of the opposite of what the influencer wanted (e.g., Wortman & Brehm, 1975; Elmore, Oyserman, Smith, & Novin, 2016). This kind of response is called reactance. Because the result is often doing the opposite, people also call it a boomerang effect. Adolescents are particularly sensitive to attempts to limit their freedom. Therefore, simply telling students that schoolwork matters is not enough.

How will this help me in training?

The *Pathways as Social Interactions* section will help you deliver Day 1 with fidelity and help you discuss Empirical and Theoretical Background in Day 2.

Teachers' Skill at Delivering Messages Matters: A firm Hand can Backfire.

- **The punchline.** Quality teaching is an attempt to make students believe certain things are true and important. For example, that they can learn that learning is worthwhile, that school is the path to their future selves. Once students incorporate these ideas, then they are more likely to be self-motivated learners. But overly strong can backfire by leading students to counter-argue.
- **Reactance is hard to undo.** Once reactance has occurred, it is pretty hard to undo because people have actually thought through why they disagree. Hence it is really important not to get there in the first place. A light touch and a feeling of choice is critical as is a feeling of ease – if it is easy to do, it must be true! Teacher skill in delivering messages matters.
- **Reactance can undermine attempts to change mindsets.** Students likely already have a accessible interpretation of what their experiences of difficulty mean, which is that the odds of success are low, which means that the task is not "for me." Hence, a heavy-handed attempt to tell them that difficulty can mean

value, that the task is important, "for me," may be counter argued. In contrast a light touch can allow students to discover this idea for themselves (Elmore, Oyserman, Smith, & Novin, 2016).

- ***We take this to heart!!*** To avoid negative effects of reactance, *Pathways* was set up so that students feel like the activities are fun and interesting activities, in which the take-home-point naturally emerges rather than as an idea forced upon students. For this reason, Session 1 of *Pathways* is organized so that teachers first briefly state what *Pathways* is about and then engage students in expressing their expectations and concerns, as well as the rules students will abide by during *Pathways*. This means that students immediately experience *Pathways* as a place in which they are heard. The pattern of having students generate their own content occurs through each session in *Pathways* – to say what they did last session, to define new constructs, and to give examples. Teachers reinforce students' skill and ability, creating a norm of participation rather than of reactance.
- ***Reactance is easy to turn on but also easy to stave off.*** Small changes in language and classroom organization can turn on or stave off reactance. To stave off reactance, teachers maintain experienced choice and autonomy. For example, in each session, teachers elicit definitions of key terms from their students. The manual provides autonomy enhancing framing, each activities involves choices of how actually to complete the activity -- "you might" rather than "you have to" framing (see also, Vansteenkiste, et al., 2004). High quality delivery makes the activities enticing so that students are made to feel that they are actively choosing to participate. High quality delivery reflects back students' words and examples as a way for take home points to be delivered so that insight is experienced as emerging from students and 'fitting' (feels congruent with) who they are and might become. The teacher's job is to know *Pathways* so well that structure feels like choice and that student responses are reflected back through the lens of the *Pathways* active ingredients so that students learn from themselves. *Pathways* activities are set up so that students are moving during each session and are organized so that they are facing the direction of action – the front if PowerPoint or writing is occurring, one another if they are sharing out. By setting the room so that students are naturally facing the focus of action, they never feel that they are being obliged to turn in a particular, unnatural way. At the same time, by facing the focus of action, being engaged feels natural.
- ***Reactance is not specific to adolescents, but can occur with adults as well.*** Taking a heavy-handed approach to try to change your teachers can have the opposite of the intended effect, with teachers becoming convinced of the opposite of what you are trying to persuade them of. People who are sensitive about having their freedom limited are more likely to notice and respond negatively to efforts to control them. Keep this in mind in the course of training, make sure that your

teachers are treated as professionals, that you actively create a collaborative environment, and that you actively share the research on which *Pathways* is based. The rationale for the specific activities comes from this empirical basis, sharing the behind-the-scenes process facilitates teachers' experience of joining together as professionals. It is useful to note this issue of reactance in discussing the structure of *Pathways* at the end of training. Note that activities are set up so that core points emerge from activities rather than being delivered by the teachers. This is true in the training as well.

- ***Turning off reactance allows students to process messages as delivered.*** Under these circumstances, activities that signal to students that experienced difficulty can imply task importance should improve motivation. If students are given a chance to directly consider and reject the message that experienced difficulty signals that school is not worth the effort, students work harder in the face of experienced difficulty. Students are also more likely shift their lay theory that experienced difficulty signals impossibility to a different theory that difficulty means important, and that in turn is energizing and productive. Indeed, rejecting a persuasive message that undermines productive action can serve as a shift in thinking so that future judgments do not align with the rejected message (McGuire & Papageorgis, 1961; McGuire, 1964), suggesting that students who reject messages that experienced difficulty signals schoolwork's impossibility may avoid falling victim to that interpretation in the future.

TEACHER SKILL MATTERS

Consider for example the result of the initial year of *Pathways*. Outside observers watched videos and coded each session for the extent that take-home points were delivered fluently and felt true. Higher scores on this 'quality of delivery' metric was a key predictor of positive outcomes for students by the end of the school year.

CONCEPTUAL METAPHOR THEORY

Abstractions are difficult to understand, and metaphors help by translating something abstract into something concrete. Metaphors are **more than just a way of speaking**. Metaphors make the abstract concrete and carry the extra meanings of the concrete metaphor back to the abstract idea. Getting the metaphor right matters. To be powerful a metaphor needs to feel sensible and repeated so that it feels natural. The key metaphor we use in *Pathways* is a journey to the future. Because we are mindful of the fact that students may already have

How will this help me in training?

The *Pathways as Social Interactions* section will help you deliver *Pathways* with fidelity in Day 1 and help you discuss Empirical and Theoretical Background in Day 2.

the idea that difficulty means impossibility, we draw on a second metaphor to target this directly. The metaphor is about disease or a germ.

Journey to the Future.

- ***The punchline*** A future self is abstract – it may or may not materialize, so it is naturally unclear whether it even matters in the present. To make a “future self” concrete and to add useful extra meanings, in *Pathways* we use a journey to the future metaphor, which carries with it the ideas of locomotion (no one lies down on a path and just quits), strategies (plans), forks in the road (choices), and roadblocks (obstacles to be gotten around). People can provide this locomotive energy (positive and negative forces). Bad ideas can be like diseases or germs that infect us and spread, so we use the idea of vaccinating yourself against the idea that difficulty means impossibility, to provide a concrete sense that this idea can do damage.
- ***We take this to heart!*** The journey metaphor is tested and does work to improve academic engagement and outcomes (e.g., Landau, Oyserman, Keefer, & Smith, 2014). The journey metaphor is therefore used throughout *Pathways*. The other metaphor used in *Pathways* is the metaphor of germs or diseases to be warded off or vaccinated against (Keefer & Landau, 2016). Germ metaphors and the idea of infection is linked to interpretation of experienced difficulty as impossibility.

STRATEGIES TO ENSURE *PATHWAYS* IS EXPERIENCED AS EASY

Tips for successfully delivering the *Pathways* train-the-trainer program generally are the same as tips for successfully implementing *Pathways* with students unless otherwise noted. Outlined next are the strategies for ensuring that engaging in *Pathways* provides an experience of ease rather than difficulty.

How will this help me in training?

The *Session Pointers* section will help you on deliver with fidelity on Day 1 and help you discuss “Guidelines and Tips” In Day 2 These are also listed in the Pathways Implementation Manual starting on page 9.

Show Ownership Use Students’ Names

- Greet students by name as they enter and you take attendance. This helps you quickly learn each student’s name, especially if they are new to you this year. Knowing student names allows you to refer to each student by name. Such personalization provides positive reinforcement of each student’s importance and agentic involvement and increases their own and other’s engagement.
- Repeat the student’s name each time he or she participates, initially simply reinforcing that he or she participated and later reinforcing specifically what the participation entailed that was on target. This enormously increases engagement.

Time is Short

- Each segment of a session has an estimated time. Pay attention to the flow so that time will be adequate and you do not run out of time to complete the session.
- The tight fit also means that the time allotment just fits the core points for reinforcement.
- Sessions are tightly packed. There should be no empty time for minds to wander. Students should experience sessions as action packed and engaging.

Keep Your Focus

- Stick to the session theme by eliciting discussion focused on the theme and weaving the focus back to the theme as highlighted in the session plans.
- You may be tempted to delve deeply into a student's life, problems, or issues or see lack of knowledge about specific steps needed to attain a particular goal as a teaching moment. Resist the temptation! Pathways works by using student active learning to highlight the three elements of identity-based motivation. It is not counseling or therapy; it is not career guidance. The program works if you stay focused on the activities as outlined within the time allotted and use positive reinforcement to evoke and reinforce the core themes of each session.
- You may be tempted to follow students into domains other than the session theme. Resist the temptation! Students are likely to bring up really interesting things, and you may be tempted to go off on tangents about other information. No matter how interesting or relevant it feels, stay true to the points for reinforcement. This is not career counseling or academic guidance. The goal of Pathways is not to teach a specific path but to help students learn (1) that there is a path, (2) what the steps are, and (3) that they can start now to make choices that help them on their paths and get around obstacles.

Positively Reinforce

- Positively reinforce speaking in a way that others can hear. If a student has spoken up, say, "That is great; you have spoken with conviction. Everyone can hear you." If you are comfortable, you also could use catch phrases, such as "Loud and Proud," that convey speaking up is a way of communicating clearly. This also can be used as a way to reinforce participation even if it is currently too quiet. Instead of saying, "I cannot hear you," say, "Say it again with conviction. I think you are on to something!"
- Positively reinforce both speakers and listeners. Positive reinforcement of listening is critical because otherwise students will view time that they are not speaking as dead time and not listen. Positive reinforcement is task oriented; it is

specific and helps students behave in ways that will help them stay in school. Positive reinforcement is not simply saying “good” or “great job!” or “interesting comment” or “good listening.” Positive reinforcement is specific; it means saying what was good or interesting about the job or comment or listening. Some examples are as follows:

- Session 1: “That was a good introduction; you gave a skill John has to succeed next year in school.”
- Session 5: “Great, you listened to Luis describe his fork and asked a clarifying question that fits his timeline. He said his fork is to choose between starting to work and then starting college and trying for a scholarship first. You said maybe needing a scholarship also is an obstacle because if you do not get one, you need to have a way around that obstacle, such as looking at colleges that cost less.”
- Session 10: “Great! Your group came up with questions instead of jumping right in with a solution.”

Be Prepared

- Use the outline agenda as a structural guide for students. Tell students what the agenda is so that they all know where they are going and can stay on track. Display the agenda from the PowerPoint slide prior to the start of each session. In addition, you will have a laminated agenda to hang up for the duration of the session. Read it, glance at it, or point to it at transition points so that students recognize the logic and flow of Pathways.
- Bring relevant material as well as newsprint and writing materials to each Pathways session.

Know How to Facilitate

- When asking questions about previous sessions, make sure to scaffold your questions, building on what students say. You can positively reinforce in rounds, reinforce, then turn to follow-up questions that other students can engage with so no one student either has the floor for too long or feels punitively spotlighted.
- When reinforcing student responses, ensure that you are connecting back to what students mentioned previously. That way both the currently responding student and previously responding students are engaged.
- Active learning requires seeing, which has three parts: (1) You as a teacher must be able to see your students so you know if they are asking a question and are engaged. (2) Your students must be able to see one another so that they can learn from each other. (3) If you are showing students something, they must be able to see. In each case, students should be oriented toward the action.

- Write student responses on newsprint or the board in large enough print that their work in the session is visible. This highlights that their responses matter and their participation is important. It also serves as a reinforcement of the themes when done well, as described next.
- Your writing of student responses on newsprint or the board should always serve to structure the flow and highlight themes. Responses that focus on themes relevant to the session should be organized physically by placing like themes together and later labeling them as they are discussed. Clustering is the physical representation of a class or common theme. It allows students to see a classification rather than simply being told that a classification exists. Creating a physical cluster from students' responses helps reinforce the notion that students have something of worth to share and actively links responses to the three Pathways active ingredients. Here are two examples:
 - In Session 2, cluster the adult image statements so that each newsprint sheet involves a theme of adulthood (job and career, lifestyle, family and relationships, and community engagement).
 - In Session 9, cluster the questions about the mathematics problem so that each sheet represents a way of doing it (e.g., as a timeline with stumbling blocks and forks, an action path, or a positive or negative model). This means that your writing is more than documenting; it also is synthesizing so that students see their own competence. When you understand the sessions well and use this method, you will find that student engagement increases.

Present a Clear Path

- Define concepts as you use them; the concepts are on the PowerPoint slides so that you can reveal them as you go along. In almost every instance, the concepts are ones for which students already have background knowledge. The sessions guide you to first elicit and structure student background knowledge and then use this to define the concept as it will be used in Pathways so that Pathways can enter students' everyday thinking.
- A central metaphor used in the Pathways program is a journey to the future. Using this metaphor repeatedly provides a concrete sense of coherence and models the idea of a pathway with steps.
- Each session has a clear sequence; sessions begin by having students say what they did in the last session, followed by a brief bridge from the last session to the current one, an introduction to the new session, guided definition of concepts for the activity, the activity, and a brief bridge to the next session.
- In this way, each session builds on the prior one and sets up the next one. Sessions tackle the active ingredients from different angles so that the themes

are well rehearsed in students' memory and automatically evoked in new contexts outside the program. Adding extras reduces the chance that this will happen.

Have a Routine

- Have a routine for distributing and picking up materials to serve both the structured student engagement function and the feeling of coherence function.
- Ask for help from your students in distributing and picking up materials if it fits the flow. The room setup is an opportunity for students to engage; have them help move desks to get the room back into its original condition. This reinforces the active participation of students.

Collaborate

- Take time to talk with other educators using Pathways and your Pathways coach for a brief recap immediately after each session. This helps you and your colleagues get better and learn from one another. Specific issues that are clear and obvious in the immediate aftermath of a session can become lost if not addressed.

PATHWAYS TEACHER TRAINING IMPLEMENTATION

Pathways Teacher Training typically occurs in two parts. First, prior to implementation, teachers engage in three, 6-hour days (although having a fourth day in which to continue practice, answer questions, and receive structured feedback would be ideal) in which they experience the intervention, get familiarized with the tools, practice and get structured, strength-building feedback. Second, during implementation, teachers engage in a weekly call-in with the teacher trainers to reflect on previous lessons and prepare for the future lessons, creating a collaborative space for teachers as they implement *Pathways*.

This section provides detailed information about the teacher training that occurs prior to implementation and how teacher trainers should conduct the *Pathways* training to maximize teacher implementation of *Pathways* the way in which it is intended. The *Pathways* trainers should follow the Training Implementation closely, including the agenda, facilitation notes, PowerPoint, and script.

Tips for successfully delivering the *Pathways* train-the-trainer program generally are the same as tips for successfully implementing *Pathways* with students unless otherwise noted.

Successful engagement in the *Pathways* Teacher Training prior to implementation involves three key tasks:

1. *Teacher participation in the Pathways program as themselves, not as students (day 1 and first half of day 2)*. This allows teachers to understand the experience of *Pathways* and the path that students will take when participating.
2. *Overview of Pathways (second half of day 2)*. This allows teachers to understand better what *Pathways* is, the research base behind *Pathways*, session pointers, and how the program and *Implementation Manual* and website are structured and organized.
3. *Teacher practice in implementing Pathways and feedback (day 3)*. This allows teachers to actually practice implementing *Pathways*, recognizing that it is difficult to implement, and will thus take effort to implement as intended. In addition, teachers receive feedback about key points and implementation pointers.

To insure adequate attention and engagement, two or more trainers should co-conduct the *Pathways* Teacher Training with no more than 30 teacher-participants per training. Having more than one trainer is important because trainers can alternate leading sessions, reducing fatigue and showing some variety in style and because trainers can divide the class in two for Day 3 practice, increasing the number of sessions each teacher gets to practice. Moreover, this allows weekly call-in participants to be divided across trainers, reducing burden during the fall. Teacher call-ins work best with no more than about 8 teachers so a group of 4 trainers for a class of 30 or so teachers is ideal.

OVERVIEW OF SESSIONS

Prior to conducting the teacher training, it is important for you, as a trainer, to review the key take-home points for each session (Figure 1), in addition to how each section hits the three active ingredients (Table 1).

Figure 1. Session Key Take Home Points

1. Introduction	You have some skills and abilities to help you succeed in the coming year. Others do too. <i>Pathways</i> is a place where your concerns and expectations will be heard; you will have some say in how <i>Pathways</i> is run. <i>Pathways</i> activities help you use your skills and abilities to succeed.
2. Adult Images	We all have images of ourselves as adults in the far future. These images are in a number of domains (jobs/careers, family/relationship, material lifestyle and community engagement), with having a job being the basis for satisfying engagement in the other domains.
3. Positive and Negative Forces	Some adult images are possible selves. They are possible because positive and negative forces show the way. Positive forces lay out paths for success and for handling difficulties and setbacks. Negative forces lay out paths for failure and examples for how not to handle difficulties and setbacks make difficulties. Positive forces remind us that setbacks are a part of life and that important tasks often are difficult. Negative forces do the opposite, they make setbacks seem like signs that the goal is impossible to attain.
4 & 5. Timelines (Part 1 & 2)	The future is like a path, it has an order and there are forks (choices) and roadblocks (obstacles) along the way. Thinking of the future this way reminds us that: (1) the choices we can have in the far future are shaped by the choices we make in the near future. (2) Difficulties are normal; (3) ways around obstacles can be planned for.
6. Possible Selves and Strategies	To make a next year future image a possible self, link it to strategies. Strategies are actions you are taking now or could take to become like your next year expected possible selves and to avoid becoming like your next year to-be-avoided possible selves. The same strategy can help us move toward a positive and away from a negative next year possible self.
7. Pathways to the Future	Strategies are actions you are taking now or could take to work on your next year expected and to-be-avoided possible selves. Strategies can form pathways to your adult possible selves by linking next year and adult possible selves through current action. Thinking about paths to the future, whether as timelines or as pathways helps us get going.
8. Action Paths	Action paths are more specific than pathways. Action paths remind you of your goal – your adult possible selves and work back from that to next year possible selves and to your current choices by breaking down strategies into something concrete –where and when during the day you will take action. By linking possible selves to action paths, we can plan for stumbling blocks and attend to our choices.

9. Puzzles	Just like people get shots to protect themselves from germs, you can protect yourself from giving up by remembering that things that seem impossible and too difficult often can be solved by breaking them down and looking for alternative ways to set up what the problem is. A feeling of difficulty is like a roadblock and breaking down the problem is a way of attaining important possible selves. Positive and negative forces in our lives can help by reminding us that difficult things can be important or by setting us up to just quit when it gets hard.
10. Solving Everyday Problems	You can use the skills you learned in Pathways to break up everyday problems and make progress more likely. Positive and negative forces can be supports to draw on. Choice points (forks) and obstacles (roadblocks) require decision-making strategies to keep going. You can ask yourself how this relates to my next year and adult possible selves to figure out what is really important. You can think of strategies and action paths, what strategy to take and when exactly to do it. You can remind yourself that difficulty sometimes signals importance so you protect yourself from just giving up.
11. Paths to Graduating	It is possible to know the steps to get from the present to the future. Some of these steps can be hard and failures along the way can happen. That is okay; important steps are often hard. Roadblocks can be gotten around, for example, by going to community college.
12. Wrap Up	Everyone has images of what the future might hold. What I do now makes a big difference for what happens later because the future is like a journey. Just like on a path, there are forks (choices) and roadblocks (failures) along the way. It will be difficult and may feel impossible, but positive and negative forces in my life can help me translate adult images into possible selves by showing what to do and not to do. Actions I take now matter because they link my adult possible selves to my next year possible selves, making pathways and action paths if I focus on my future and connect actions to specifics like when and where I will do things. I have some skills and abilities and can plan for difficulties and come up with ways around failures along the way. I can use my Pathways language in my everyday thinking and that will help me remember to use my skills and abilities and keep going.

Figure 1 shows that each session builds on the next. Table 1 shows that the three active ingredients—making the future feel connected to the present, making strategies feel like something new, and interpreting difficulty as being important—are presented multiple times in somewhat different forms so that the sessions reinforce one another and students have an opportunity to engage the material in multiple ways.

Table 1. Alignment of Sessions to Active Ingredients

	Sessions												
	1	2	3	4	5	6	7	8	9	10	11	12	
Active Ingredients													
Future self: Making the future self feel connected to the present	✓	✓		✓	✓	✓	✓	✓				✓	✓
Strategies: Making relevant strategies feel like something one can do now	✓		✓			✓	✓	✓					✓
Productive interpretation of experienced difficulty: Experienced difficulty signals that a task is important rather than impossible for oneself			✓	✓	✓					✓	✓	✓	✓

The activities build from session to session in a way that both illuminates the active ingredients of identity-based motivation and uses knowledge gained in basic research by documenting that people are sensitive to their experienced ease and difficulty in ongoing situations but are typically insensitive to the source of their experiences. Experienced ease is automatically interpreted as positive (e.g., this is “for me,” “I get this”). For this reason, the sessions are organized from easy to more difficult so that students intuitively feel that Pathways is for them; this engagement can be leveraged so that students will be engaged when dealing with more challenging material. The language employs knowledge gained in basic research by documenting that metaphoric and body-based images can make abstract ideas concrete and shifting thinking from abstract to concrete. Action tendencies are increased so that students will start sooner and persist longer in working on their goals.

TRAINING MATERIALS

Prior to the teacher-participant training, ensure that you have all the materials prepared ahead of time for each session. Table 1 provides a detailed list of materials that you will need to effectively engage teachers in the training. Make sure to know the number of participants who will be engaging in the training to accurately prepare materials. You will need **two sets of materials** for each teacher participant. The first set is used in Days 1 and 2 when teachers participate in *Pathways* themselves. The second set is used in Day 3 when teachers practice implementing Pathways. In addition to the materials outlined in Table 1, you will need:

- Pathways training agendas for each day (on newsprint or handout)
- *Pathways* Implementation PowerPoint deck

- *Pathways* Teacher Training PowerPoint deck
- *Get to Know You Bingo* Activity Sheet
- *Multi-colored stickers to put on breakfast plates*
- Teacher Training Handouts 1 and 2
- Teacher Schedule Implementation Powerpoint (teacher trainers should develop depending on the school schedule for the year).
- Weekly Check-in Handout that describes how to log into the video-enabled technology for weekly meetings –e.g., skype or gotomeeting or Google hangout (teacher trainers should decide which modalities they prefer).
- An on-line or physical “Parking Lot” a place that teachers can send or deposit questions or comments in breaks during Days 1 and 2 (as they engage in the activities)
- *Pathways* website <http://www.pathwaysintervention.com/>
- A *Pathways* Fidelity Checklist and Quality of Delivery Measure for each of the sessions that teachers deliver in Day 3 to support the feedback you provide as they implement *Pathways*. Both can be found on the website under *Pathways Fidelity of Implementation Measures*.

Table 2. Training Materials

Session	Material List
For Each Session	<ul style="list-style-type: none"> • Laminated Agenda for each session • PowerPoint deck • Newsprint and markers • Pencils or pens
Session 1: Introduction to Pathways	<ul style="list-style-type: none"> • Origami set • Activity sheet: Our skills and abilities • Newsprint for (1) Introductions; (2) Expectations and Concerns; (3) Rules; and (4) Naming the Group
Session 2: Adult Images	<ul style="list-style-type: none"> • Laminated pictures • Activity sheet: Adult images • Newsprint for Cluster on the Board: Adult Images (4 sheets)
Session 3: Positive and Negative Forces	<ul style="list-style-type: none"> • Activity sheet: Positive and Negative Forces • Newsprint for Cluster on the Board: Positive and Negative Forces
Sessions 4 & 5: Timelines	<ul style="list-style-type: none"> • Pack of markers per student • Rulers • Scratch paper • One timeline for each student (three pieces of card stock taped together on short side) • Newsprint for Timeline
Session 6: Possible Selves and Strategies	<ul style="list-style-type: none"> • Red and blue markers • Pathways Board • Next Year Possible Selves sheet (laminated) • Strategies sheet (laminated)
Session 7: Pathways to the Future	<ul style="list-style-type: none"> • Red and blue markers • Pathways Board (on 12 x 18 card stock) • Adult/Far Future Possible Selves sheet (laminated)
Session 8: Action Paths	<ul style="list-style-type: none"> • Activity Sheet: Action Paths • Newsprint for Cluster on the Board: Action Paths

Session 9: Puzzles	<ul style="list-style-type: none"> • Activity Sheet: Name That Teacher • Activity Sheet: Who’s Dating Whom • Newsprint: Student examples of inoculation • Newsprint per group.
Session 10: Everyday Problems	<ul style="list-style-type: none"> • Activity Sheet: Mathematics Classroom • Scratch paper • Newsprint per group • Newsprint for Cluster on the Board: Solving the Math problem • Newsprint for Cluster on the Board: Problems in a Bag
Session 11: Paths to Graduating	<ul style="list-style-type: none"> • Activity Sheet: Graduating from High School • Activity Sheet: Neighborhood High School Course Sequence • Activity Sheet: Selective High School Course Sequence • Activity Sheet: Getting into College • Scratch paper • Newsprint for Cluster on the Board: High School Graduation Requirements • Newsprint for Cluster on the Board: Brainstorm College Requirements
Session 12: Wrap-Up	<ul style="list-style-type: none"> • Pathways to Success Overview • Pathways to Success Certificate • Newsprint for “What did we do in Pathways?”

USING THE TRAINING IMPLEMENTATION SECTION

The following section provides detailed information about each day of training. Use the script and facilitation notes below to support implementation of training for each of the three days. The script provides you the information on what you should say to the teachers during implementation. You do not have to follow the script verbatim, but ensure that the key take-home points (outlined prior to each major section of the training) come across in your delivery. The facilitation notes provides you information on which PowerPoint slide and handout are associated with each script, as well as additional notes that will help engage teachers in learning the content.

DAY 1

Day 1 starts with a welcome and introduction to the trainers and past teacher responses, the agenda for the trainings (see Appendix A for an example agenda), objectives, and brief overview of Pathways, taking the first 30 minutes. Then Day 1 is focused on teachers' experience of *Pathways* as actual participants. Use the *Pathways to Success Implementation Manual* and PowerPoint slides to facilitate teacher engagement in the Pathways program. Prior to training, we suggest offering teachers a breakfast and a get to know you exercise (described below).

Pre-Training (30 minutes) Breakfast

<p>Breakfast and Get to Know You Exercise</p> <p>As people enter the room point their attention to the sample student letters that are on the PowerPoint slide. This is a “get to know you” about student thoughts on Pathways.</p> <p>In addition, let them know that they will be playing <i>Get to Know You Bingo</i> so that they can learn more information about you and the other teachers who will be attending training. Let them know you will start on time so they only have the allotted time to have breakfast and complete the Bingo board.</p>	<p>Teacher Training PowerPoint Slide 1</p> <p><i>Handout: Get to Know You Bingo</i></p>
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Welcome and Introduction (30 minutes + 5 minute break)

Take home points:

- It works – there is an enormous body of research. We liked it and can do it. If you do it, you will be able to feel it.
- All questions will be answered.
- We are a team.

Welcome, *Pathways to Success* Teacher Training (5 minutes)

“Welcome to the *Pathways to Success* Teacher Training. **We are excited to be** here with you over the next three days to learn about the *Pathways to Success* program. ***Pathways* is a short social-psychological intervention** that has been successful with children from high-risk backgrounds, and will help develop skills and mindsets in your students that will **help prepare them as they transition to high school.**”

“We are going to do introductions in a bit as the part of *Pathways*; however, I want to provide you a quick introduction about myself [*see sidebar*].”

Teacher Training
PowerPoint Slide 2

Facilitation note:
Provide a quick introduction about yourself, your name and who you are. Explain how you came to lead the training and your experience with Pathways. Give concrete examples or personal stories of how you have used Pathways. In addition, state where you teach, so teachers know where this has been applied and with whom this has been applied in the past. Stress that the intervention has been applied in places where parents are very involved and places where they are not

Why Implement *Pathways* (5 minutes)Teacher Training
PowerPoint Slide 3

“Before we get started, **a few words about why we as teachers want to implement *Pathways***. Teachers who have used *Pathways* have said it influenced their classroom in the following ways.

“Teachers say

- ***Pathways* makes you a better teacher**, providing new and different ways to engage your students and build relationships with them. The skills you learn here are transferrable to other aspects of your teaching. At the end of this training that you will start seeing your teaching in a different way.
- ***Pathways* helps you set up your school year**, providing language students can grasp and we can use all year.
- ***Pathways* language helps students grasp how school now connects to their far future** selves and gives school meaning.
- ***Pathways* is a Tier 1 intervention that everyone gets** and all 8th grader can relate to it.
- ***Pathways* helps middle school students look to the future and high school**, providing concrete tools to help students get ready for high school whether they got into the high school they wanted or not.
- **I can see results both immediately and over time**, *Pathways* provides student’s skills to use as they engage in difficulties, it lays the groundwork for more engagement and reduces later classroom management problems.

Agenda - Days 1-3 (5 minutes)

Review agenda for the day “Pathways training is quite unique in that **we start with experiencing Pathways as a participant** so that you know **how it feels to personally encounter the elements in Pathways sessions**. This reduces uncertainty about how it would feel, whether it is different from other programs and leads to different insights. **The big difference between what we are doing and what you will do is pacing**. Instead of twice a week for six weeks at the beginning of the year, we will do the first nine sessions today and the last three sessions on Day 2 [tomorrow]. That is not optimal for learning – which is better with spacing and active re-learning after chances to forget. Also, we are somewhat fewer in number than a typical classroom. To maintain the same pace, we will **move at the same speed as you are being asked to as a Pathways leader in your classroom**. In training, each session will take approximately 30 minutes. With a full classroom, this translates to 40-60 minutes.

After experiencing *Pathways*, on Day 2 [tomorrow], I will share an overview of the **empirical evidence supporting Pathways**, the key problem Pathways is designed to resolve, the **theory and key concepts behind Pathways**, how each session brings targeted concept to life and tips for high quality implementation. Then we will examine the **Pathways website, videos and Implementation Manual** and make sure you can log into the weekly call-ins. You will be given sessions to practice and **implement during Day 3**. You will prep in the evening by using the manual and video materials. Lastly, we will discuss logistics for when you will implement in your classroom and for weekly check-ins. **Day 3 you will each implement at least one session and receive structured feedback**, using the same tools our research team uses to determine quality and depth of understanding so everyone will leave with an internalized sense of the *Pathways* model.

Look at the agenda for today. You have a 10-minute break every hour and a half hour for lunch. The breaks are for restroom, coffee, and your devices. Turn on your phones and devices at these times.

Otherwise, please silence your devices and put them away [*model this by putting your own away*]. For tomorrow, please remember to bring in the device you will be using to get onto the website and for weekly video-call ins. Part of training is getting practiced doing that.

Teacher Training
PowerPoint 4

Facilitation note:
Have copies of the agenda for each day to review or write on newsprint. This helps model to teachers that they should have the agenda up each day when they implement Pathways

<p>Training Objectives (5 minutes)</p> <p>“Here are our objectives for this 3-day training:</p> <ul style="list-style-type: none"> • To make the <i>Pathways</i> experience real so you know what you want your students to experience. • To clarify the active ingredients, theoretical rationale and research evidence behind the <i>Pathways</i> program and our training over the next three Days. This helps you know exactly why you are doing what you are doing • To understand the structure and logistics of delivering Pathways by reviewing the website, video materials and Implementation Manual. This helps you know exactly how to attain high quality results using the Pathways model. • To give you a chance to practice leading the activities and receive feedback and get a feel for working together as a team to improve everyone’s delivery. • To clarify logistics, such as when will you implement Pathways in your classroom, how will weekly call-ins occur, and using equipment.” 	<p>Teacher Training PowerPoint Slide 5</p>
<p>Logistics (4 minutes)</p> <p>“Here are the specific logistics for training.”</p>	<p>Teacher Training PowerPoint Slide 6</p> <p><i>Facilitation note: Provide location specific information – where is the bathroom, where water and coffee are available. If there is paperwork to be filled out, it will have to be done during breaks if not completed before.</i></p>

Introduction to Pathways (5 minutes)

“*Pathways to Success* is a **social-psychological intervention rooted in Identity-Based Motivation Theory**. *Pathways* builds on an extensive research base which we will describe in greater detail tomorrow. Each element is **carefully researched and very purposeful, including activity content and structure**. Once mastered, the basic powerful elements are useful not only for *Pathways* but for teaching and other aspects of life. Thus, though *Pathways* is typically conducted with eighth graders, **the principles and the theory behind it can be applied to anyone, including adults**. There are **three active ingredients** in *Pathways* content:

1. Making the future feel connected to the present
2. Making strategies feel like something one can do now
3. Framing interpretation of experienced difficulty as a signal that a task is important (“no pain, no gain”) rather than impossible for oneself.

“**Because the principles and active ingredients of *Pathways* can be applied to anyone**, training is set up so that you experience the program first as participants to get a sense of how it **feels personally to encounter each of the elements** through activities and the group process. Pretending to be a student does not have the same effect so we are not doing that. Then, **with your own experience in mind, the theory and structure of the program will be easier to understand and apply**.

Pathways helps **shift student’s mindsets to be more future-action oriented** and focused on school as the path to the future. **It is a Tier 1 universal intervention** to bolster academic and socio-emotional skills. It complements career programming but is not a career or counseling program.

“**After experiencing the program you will switch perspectives from participant to instructor**. I know you have lots of questions. But, it turns out that lots of them are answered by simply experiencing the program. **Give yourself that chance to have the experience before you switch roles to thinking how you would do this in your classroom with your students**. So, save your instructor mode questions --whether about logistics, about why activities are structured as they are, about how 8th graders respond, and so on, **for tomorrow afternoon**. To make that easier, **use the parking lot** during lunch and break [*point to where in the room it is*] to write your questions. We will go through all questions after you have a chance to experience the program as participants.”

Teacher Training
PowerPoint Slide 7 +
Parking Lot
Newsprint

Facilitation note: At this time, describe why the school is involved in Pathways and funding if any

<p>Session Engagement (1 minutes)</p> <p>“Remember, you will first experience Pathways as a participant, not as an eighth grader. Think about <i>you</i> as you engage in the program. In fact, I have used <i>Pathways</i> concepts in my own life., and found it beneficial to think about this program applies to the decisions and actions I take on a daily basis and how it connects to my future goals”</p>	<p>Teacher Training PowerPoint Slide 8</p>
<p>Break (5 minutes)</p>	

Implementation of Sessions 1-4 (2 hours + 10 minute break)

General facilitation note:

- As you implement each session, use the implementation manual as if you were teaching. For the most part, the program can be delivered as it would to middle school students; however, there are a few key changes that may be helpful when delivering the intervention to adults. These will be noted along the way.
- At this point, you will need to transition to the Implementation PowerPoint slides

<p>Session 1: Introduction to Pathways to Success (30 minutes, trainer led)</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: Instead of focusing on skills that can help participants succeed in school, the focus can be on skills that help teachers succeed at work.</i></p>
<p>Session 2: Adult Images (30 minutes, trainer led)</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation notes: Instead of calling the images “adult images,” they can be referred to as “far future images” or “10-year future images.” Make sure the session touches on the lifestyle domain, which tends to be more common with students but may be uncommon with adults.</i></p>

Break (10 minutes)	
Session 3: Positive and Negative Forces (30 minutes, trainer led)	Implementation PowerPoint Slides
Session 4: Timelines, Part 1 (30 minutes, trainer led)	Implementation PowerPoint Slides

Lunch (30 minutes)

Lunch (30 minutes)	<i>Facilitation notes: Limit lunch to 30-45 minutes. If you go over 45 minutes, it will be difficult to get back on track and you will not be able to finish the program in the provided time.</i>
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Implementation of Sessions 7-9 (2 hours 30 minutes + 10 minute break)

Session 5: Timelines, Part 2 (30 minutes, trainer led)	Implementation PowerPoint Slides
Session 6: Possible Selves and Strategies (30 minutes, trainer led)	Implementation PowerPoint Slides
Break (5 minutes)	
Session 7: Pathways to the Future (30 minutes, trainer led)	Implementation PowerPoint Slides
Session 8: Action Paths (30 minutes, trainer led)	Implementation PowerPoint Slides
Break (5 minutes)	
Session 9: Puzzles (30 minutes, trainer led)	Implementation PowerPoint Slides

Adjourn (5 minutes)

<p>Adjourn</p> <p>“Thank you! You experienced Pathways sessions one to nine and engaged deeply by <i>[give specific examples and in this way model what positive reinforcement actually looks like]</i>. Tomorrow we will finish experiencing <i>Pathways</i> and shift to the research and theory, answer questions you have, and become familiar with the website, video materials and Implementation Manual. Remember to bring in the device you will be using to look at the website and do your weekly video call-ins for practice tomorrow.</p>	<p>Teacher Training PowerPoint Slide 9</p>
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End of Day Trainer Preparation for Day 2

There are 12 sessions for participants to deliver in Day 3. If each is delivered in 10-15 minutes and feedback is provided in 10 minutes, then each session requires 25 minutes, leaving time to do each session with feedback, 30 minutes for lunch and 30 minutes for 6 5-minute breaks. In order for Day 3 to run smoothly, instructions at the end of Day 2 need to be clear and need to tell participants what to prep. There is no time to lose on Days 2 and 3 given how tight the schedule is so you have to have explained what to do clearly and divide groups so that each trainer has their own group.

Trainers complete these tasks after participants leave

1. **Divide participants** among trainers to maximize the time that participants have delivering key parts of sessions on Day 3.
2. **Divide sessions** among participants in each trainer group.
3. **Prepare the Handout of the *Pathways* school schedule** for the upcoming academic year so that content covered across two sessions occur in the same week (Timelines sessions 4 and 5, Pathways Boards sessions 6 and 7), and that takes into account both days off for fall holidays (e.g., Jewish New Year, Day of Atonement) and data collection if this is part of the plan. Typically a Tuesday-Thursday cycle works – with the first day being the baseline survey if data are being collected. Plan to finish by Halloween. Remember to check:
 - a. Morning or afternoon? Over the years, teachers have delivered in both morning and end of day slots. Both have advantages and drawbacks.
 - b. Twice a week? Once-a-week scheduling has been tried and proved to yield worse quality results, as it was hard for teachers to retain their training and for students to retain what they had been learning from week to week.

- c. Consistent across schools? It is important that schools are on the same session otherwise weekly call ins do not work. Offer 2 schedules for Pathways and a call-in time that is mid-week.
 - d. Call-in times? There can be different call-ins for each trainer so that participants have a choice, but this is not completely open-ended.
4. (4) Read any questions left in the parking lot; discuss any questions that came up during the day so that where in the Day 2 training they are addressed is clear. The questions and answers should be woven into the structure of the day where they fit (e.g., into Empirical and theoretical background, Structure of Pathways sessions, Website and manual implementation, Guidelines and tips in prepping for and delivering Pathways, Pathways Logistics).

DAY 2

Day 2 starts with welcoming teachers back to training and briefly reviewing the day’s agenda, followed by finishing the final *Pathways* sessions, taking the first two hours of the day. Remind participants that they are **participants not pretend 8th graders**; the only caveat is Session 11 in which the focus is on using 8th grade, high school, and college requirements. Here too, teachers should answer with what they actually know, not what they think students know. The last hour before lunch, focus shifts to the research base behind *Pathways*. After lunch, focus shifts to logistics on using the materials and calling in. Teacher questions should be addressed throughout by weaving in the question and answer in the relevant section. Again, prior to training, we suggest offering teachers a breakfast and a get to know you exercise (described below).

Pre-Training (30 minutes) Breakfast

<p>Breakfast and Get to Know You Exercise</p> <p>As people enter the room, let them grab breakfast. But also let them know that they will be sitting next at the table based on the sticker that is on their plate (e.g., green stickers will sit at the green table).the goal is to allow teachers to get to know each other. Potential questions for teachers to discuss include:</p> <ul style="list-style-type: none"> - What got you into teaching? - What has been the most rewarding part of teaching thus far? - What are some of the most successful programs that you have implemented? Why do you think they were successful? - How have you helped students prepare for the future prior to <i>Pathways</i>? - Do you see any <i>Pathways</i> connections in your own life? 	<p><i>Color tabs on plates</i></p>
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Welcome and Introduction (5 minutes)

<p>Pathways to Success Teacher Training – Day 2 (5 minutes)</p> <p>“Welcome to the <i>Pathways to Success</i> Teacher Training, Day 2. In Day 1 we experienced the first nine sessions of Pathways.”</p> <p>“[<i>Review agenda</i>]. Today we will experience Sessions 10 through 12 of <i>Pathways</i>. Remember you are participating as yourself, not as a pretend student. This is true even in Session 11 in which we are focused on figuring out high school graduation and college entry requirements. Go with what you know.</p> <p>“Then we will look at the research and theory.</p> <p>“After that we will break for lunch. After lunch, we will examine the <i>Pathways</i> website and videos, click through the materials and you will be given your personal <i>Pathways Teacher Implementation Manual</i>. We will go over the structure of the website, the manual and key components. Then we will go over logistics and preparation tips and your homework for tomorrow. As promised we read all of your parking lot questions from yesterday and we will get your questions from today and read them over lunch. We will address each question in the place it fits through the rest of today so that our discussion is focused</p> <p>“Please notice the break and lunch schedule. This is a long day; we did put in breaks at approximately each hour. However, some are only 5 minutes for a quick restroom break or phone check in. Turn your devices to silent and put them away so that we can get started.” [<i>Trainer model doing this as well</i>]</p>	<p>Teacher Training PowerPoint Slide 10</p> <p><i>Facilitation note: Have copies of the agenda for each day to review or write on newsprint</i></p> <p><i>At this point, you will need to transition to the Implementation PowerPoint slides</i></p>
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Implementation of Sessions 10-12 (1 hour and 30 minutes + 15 minutes in breaks)

<p>Session 10: Solving Everyday Problems (30 minutes, trainer led)</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation notes: In sessions 10 and 11 make sure to use “far future possible selves” or “10-year possible selves.” Do not use “adult possible selves.”</i></p>
<p>Break (5 minutes)</p>	
<p>Session 11: Paths to Graduating (30 minutes, trainer led)</p>	<p>Implementation PowerPoint Slides</p>
<p>Session 12: Wrap Up (30 minutes, trainer led)</p>	<p>Implementation PowerPoint Slides</p>

Break (10 minutes)	
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Empirical and Theoretical Background (65 minutes + 5 minutes break)

Take home points:

- IBM has three elements, each are proven to work
- Pathways uses IBM and also more general cognitive psychology about how people learn and remember (interpretation of experienced ease and difficulty, metaphors to concretize the abstract)
- Demonstrate how IBM and key cognitive psychological concepts (interpretation of experienced ease and difficulty, metaphor theory) actually work and are used in Pathways
- The IBM elements are defined for students. The cognitive concepts are used but not defined for students.

Empirical and Theoretical Background (1 minute)	Teacher Training PowerPoint Slide 11
“After having experienced Pathways a first question is, does <i>Pathways</i> work? Let’s hear from the developer, Dr. Oyserman herself”	

Empirical Background (2 minutes)

“The question of whether *Pathways* works was rigorously tested twice, once as an afterschool program and once as an in-school program. The in-school program was a randomized control trial with a 2-year follow-up. Both trials were in Detroit Public Schools and both found a significant improvement in school grades, school attendance, time spent on homework, teacher report of classroom engagement and behavior, as well as change in student possible selves and strategies. Not only did students in the intervention improve but their improvement depended on **change in possible selves and strategies. What that means is changes in academic outcomes depended on change in possible selves and strategies. This is important because it shows that the theoretical model matters.**

“**People sometimes ask: “How can I best understand the size of the effect of being in *Pathways*?”** That is a good question. I think a useful comparison is to ask how much difference does having a highly engaged parent compared to having an average or low engaged parent make. It turns out that being in *Pathways* is like having a highly engaged parent – it changes students by about a third of a letter grade.

Our website has the links to all of the papers testing each of these statements if you want to read more.”

“We have also evaluated *Pathways* as a teacher-led program in Chicago. We found that teachers who delivered *Pathways* with high quality had students changed more.

On average, by the end of the school year, students are not feeling as optimistic as they were in the fall; they report fewer strategies and fewer academic possible selves by the end of the year. If you deliver *Pathways* with high quality your students are protected from this drop.

They feel more confident that if they really engage with their schoolwork, they will be able to learn and improve.”

Delivering *Pathways* with higher quality also predicts student grades afterwards.

“You might ask ‘**what does it mean to deliver *Pathways* with high quality?**’. That is an important question. It means not only providing the activities but providing the activities in a way that is clear and in a way that uses students own words in framing the take home points. It means being prepared and positively reinforcing student engagement in a way that keeps focus on the take home points rather than losing focus.”.

(Open video of Dr. Oyserman) Teacher Training PowerPoint Slide 12

Facilitation note. Let teachers know that we do not have time to get to the specifics of all of the research studies, but if they want to learn more about the research behind Pathways, it is on the website that you will share with them in a bit.

Screenshot of the webpage should be on the powerpoint

Why Should We Implement *Pathways*? (4 minutes)

“**Why should we implement *Pathways*?”** A first answer to that question is that *Pathways* works, as reflected in the research I just described.

“A second answer to the question of Why Implement? Is that *Pathways* works for all children, not just for some. The research I just described found positive effects for boys and girls, Latino, African American, and white students.

“*Pathways* is built on a general theory, not limited to the 8th grade. Because the theory works for everyone, we had you first experience the *Pathways* program as yourselves. Everyone has images of the far future that they may fail to link to right now. Everyone has a propensity to interpret difficulty as impossibility. These same processes are at work when we as adults fail to save enough money each year for retirement; fail to eat healthy enough and to exercise regularly. We know we should be doing these things for our future self but it’s easy to stave off for tomorrow what we need to do today unless the future feels relevant to right now.”

“A third answer to the question of Why Implement involves reframing the question to say ‘**What is the problem that *Pathways* addresses?**’

“The problem that *Pathways* addresses is that students are often unclear about the **purpose and meaning of school**. If students do not see school as the path to their futures then being engaged does not make much sense. *Pathways* addresses this problem in three ways. First, *Pathways* establishes connection between adult and next year possible selves and current effort. Second, *Pathways* highlights that now is the time to act. Third, *Pathways* highlights that difficulties along the way are not only normal and to be planned for, but actually can be signals of importance. Each of these build on one another, if adult me, next year me, and current me are connected, then now is the time to act, if now is the time to act, I cannot just quit when things get difficult or I fail.

“Students often have vague or specific images of the adult they hope they might become or are afraid they could become but have no idea how this set of far future images might relate to right now. *Pathways* helps students link these adult images to current action without judging the adult images students have.

“Because *Pathways* is different from other programs in critical but perhaps subtle ways, let me take a moment to say what *Pathways* is not. *Pathways* is not a career guidance intervention. Students can and should change their minds about the career they are planning on as they move through school. Our goal is to make sure that paths remain open by creating a sense that school is the path to an adulthood of purpose and meaning.

Pathways is also not focused on teaching student how to choose or attain a specific career. *Pathways* is meant to give students the mindset

Open Dr. Oyserman Video

Teacher Training PowerPoint slide 13

What are the core Pathways ideas? (2 minutes)

“There are three core ideas in *Pathways*. The core ideas are connection, strategies, and difficulty as importance. Let me explain.

The journey towards adulthood is not about grades or a particular career but about having work that provides purpose, allows one to raise a family, have a lifestyle and to be an engaged citizen and member of one’s community.

Everyday life can feel easy or difficult; people do not have to interpret what ease or difficulty means, but often do. These interpretations matter.

For example, it is common for people say: “I’m not a math person” and this is actually their interpretation of their experienced difficulty with math. They interpret difficulty as impossibility. The alternative is to notice the difficulty and ask “in what ways does this difficulty imply that math might be important for me?”

The goal of *Pathways* is not that we try to convince people that everyone will become a mathematical superstar or develop new math theorems. Rather, the goal is that students get practice in seeing difficulty as a signal of potential value -- “no pain, no gain.”

In the case of math, this means that all students can learn what they need to get through high school. It means that getting through two years of algebra and whatever else they need to get to their next steps might be hard but that it has value because it helps move towards being an adult with a meaningful path to each of the domains of adulthood.”

“Students often fail to see any connection between their adult images – the person they hope to be as an adult and everyday tasks in school. This is a problem because doing well in middle school is foundational in the journey toward adulthood.

Without a clear sense that school matters, students often fail to fully engage and misinterpret difficulties along the way as implying that school is not for them or that the odds of success are low rather than focusing on experienced difficulty as a signal of importance and value.

“Without the *Pathways* intervention, many students wait too long to get started, put in less effort and ultimately fail to attain intermediate goals that are important on the pathway to a successful adulthood.

(Open Dr. Oyserman video)

Theoretical Components and Their Use in Pathways Sessions (2 minutes)

“Theories are testable sets of ideas. The overarching theory used in the *Pathways* intervention and activities is **called Identity-Based Motivation or I-B-M**. IBM includes the three ideas I just described (connection, strategies, and difficulty as importance).

It focuses on the idea that people believe that they know something about who they are motivated to act and make sense of their experiences in ways that fit their sense of who they are.

People not only believe this about themselves, they believe it about others, that there is some essence or core that predicts what people will do. However, thinking is not decontextualized it is sensitively attuned to what immediate and persistent contexts imply for who one is and can become and hence what experiences of ease and difficulty imply for whether or how to act, and strategies one can use.

This sensitivity means that even though the self feels stable it is actually dynamically constructed in context, this means that you can help students by creating a context in which they see a path from now to their future self, interpret difficulty productively, and take action to attain their goals – even if the specifics of their identities change.

My graduate students and I tested IBM piece by piece in experiments with middle and high school students, college students and adults. Some experiments were in the U.S. and others were in other countries. Sometimes participants came from wealthy backgrounds and other times from more working class backgrounds or very low-income families. Participants varied in their level of education and their racial-ethnic heritage as well. Because each component of IBM was separately verified to matter, each is an **“active ingredient” of the *Pathways* program**.

“To create a feeling of connection we use a variety of techniques, some focus on what students are thinking about – their next year and adult possible selves, and some focus on taking action – the strategies students have.

To create a feeling that difficulty means importance we also use a variety of techniques, some focus on what we say and others on what we do. As it turns out, these techniques also matter generally for learning.

Finally to link right now, next year, and adult possible selves and to sustain effort in the face of difficulties, we also use a variety of techniques, an important one is the Journey Metaphor. I will talk more about each of our techniques later.

You might think that you do not care about theory, that you just want to know that it works and how to do it. But you are wrong because quality delivery requires understanding the theory. A key component of *Pathways* is using students’ own words to bring out the take home

(Open Dr. Oyserman video) Teacher Training PowerPoint Slide 14

*Facilitation note:
Use Handout as you go through each of the theory components.*

Introducing the concept of Journey Metaphor (5 minute)

“Just like we did in each *Pathways session*, before starting, let’s hear from you so that we build on our knowledge in introducing this new concept of metaphor. Can someone say what a metaphor is?”

Okay. So a **metaphor is a way to make sense of something abstract by linking it to something concrete that seems to make the meaning clearer even if it is not literally applicable.**

“Think about the title of the intervention --*Pathways*, and the session activities related to paths --timelines with roadblocks and forks in the road, pathways connecting next year to adult possible selves through strategies, and action paths. What is the metaphor here? *[ask for a comment on this]*.”

“Life is not really literally a journey but calling it a journey seems to make sense. Using metaphors is not a way of talking but a way of thinking – without a metaphor it is impossible to think about something like the future.

“Let’s hear Dr. Oyserman on how metaphors are used in Pathways.”

Teacher Training
PowerPoint Slide 15

*Facilitation note:
Use Handout 1 as you go through each of the theory components.*

Journey Metaphor in Pathways (2 minutes)

“Metaphors are ways to concretize things that are abstract. Getting concrete provides a sense of certainty. So what is the abstract thing that we need to make concrete in the *Pathways* intervention?”

“**The main abstract thing for *Pathways* is “future time.”** The future is abstract because what might be in the future is not for sure --after all it has not yet happened and depends on a variety of factors, not all of which are knowable in the present. **The concretizing metaphor for thinking about future time is distance.** In everyday thinking and reasoning, people translate time into distance. We say something is “far away” or “a long time” from now or in the “distal future” or that it is “in a short time” or “a long time” from now.

“You probably use these time to distance metaphors without even noticing. **The metaphor works because it feels “real”, not like a turn of phrase.** If we think of time as distance, then people can locomote through time just like they do when they travel distances – they can go on journeys and follow paths. Not only that, but people know how journeys work – there are forks in the road (choices), there are roadblocks (obstacles to get around). And, people know that journeys involve action.

“This action continues even when something appears to get in the way. No one lies down on the road or sits on the sidewalk and gives up or waits for tomorrow. People take steps on journeys even if the steps are slow or turn out to be in the wrong direction. People know that they may need to backtrack. They may need to ask for directions. They may be lost for a while. Bad things may happen because of choices – planning errors or not doing the right thing. But bad things can also happen because of circumstances beyond their control. In spite of these difficulties, people persevere.

“In developing *Pathways*, I used the idea of paths and journeys as **linking the present, right now, to the future, later.**

“Together with graduate students and colleagues, I tested these ideas to make sure that using a journey metaphor actually helps students get going on schoolwork and that it does so because it makes students feel more connected to their future selves. **When people think about getting from now to the future as a journey, they transfer their knowledge about journeys to thinking about the future self.** Because using a journey metaphor is really helpful, we use that language throughout *Pathways*.”

(Open Dr. Oyserman video)

*Facilitation note:
Use Handout 1 as you go through each of the theory components.*

<p>Journey is Part of Pathways (7-9 minutes)</p> <p>“Which sessions of <i>Pathways</i> involve the journey or path metaphor? Jot your thoughts down on Handout 1”</p> <p><i>Provide time for teachers to discuss the questions. Once they have discussed (5 minutes), click the animation on the PowerPoint slide.</i></p> <p>“The idea of a journey is deeply embedded in the structure of <i>Pathways</i>. (1 min)</p> <ul style="list-style-type: none"> - People typically have a destination in mind when they start a journey – hence we do Adult Images in Session 2. - Journeys involve locomotion hence in Session 3 Positive and Negative Forces are described as forces that can stimulate locomotion, getting going. - Getting the idea of future time as actually having some order and being like a journey is powerful but not immediately graspable – so it is repeated in different forms across sessions – in Sessions 4 and 5 (Timelines) it is in the form of a path with forks and roadblocks – which begins to articulate some parts of the journey but does not yet require immediate actions or any focus on actual action. - People take steps because they are trying to get somewhere – hence in Session 6 Possible Selves we first consider next year possible selves and then the strategies to get there. Then we link this piece of the journey to Adult Possible Selves in Session 7. - People are willing to suffer if the destination is worthwhile – hence in Session 8 Action Paths we start with the end - a far future- and work toward right now - where and when to take immediate action. - We want students to consider school as the path to their future and hence in Session 11 we have students articulate what they know about the actions needed to finish 8th grade and apply that to finishing high school and getting into college. The idea is that there are forks or choices but also roadblocks or obstacles and that community college is always a way around obstacles.” 	<p>Teacher Training PowerPoint Slide 16</p> <p><i>Facilitation note: Facilitate a discussion with the teachers about which sessions they think involves the journey or path metaphor. Once they had the discussion, click the animation to reveal the answer, and read the script.</i></p>
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Interpreting Experienced Ease (3 minutes)

“**Everyday life involves experiences of ease and difficulty.** People do not have to interpret these experiences but often do, using a set of simple everyday or “lay theories” that inform them about what the experienced ease or difficulty means.

“The *Pathways* program is structured to take into account the **lay theories people use to interpret their experienced ease and difficulty in imagining, starting, or persisting in a task.** When working on a task for instance, the most common lay theory people use to interpret an experience of ease is “I can do this, I am good at this, this is for me!” and the most common lay theory people use to interpret their experienced difficulty on a task is “I cannot do this, I am not good at this, this is not for me!”

“These theories are not the only way that people can understand what ease and difficulty mean but they are in fact so common that **we start *Pathways* with the assumption that these interpretations are peoples’ default settings.**

Pathways uses the link between experienced ease and the dominant interpretation: “I can do this” to increase student buy-in in two ways.

First, by making the initial *Pathways* activities feel easy and Second by framing the take-home points in students’ own words so that the core ideas feel easy to understand. Using ease means “for me” leaves students with the feeling that “*Pathways* is for me.”

Let me describe this in detail:

“For students to engage and feel that ***Pathways* is for them, the deep structure needs to convey a sense of ease.**

A sense of ease comes from

making initial activities simple

making the initial structure of participation highly structured and clear;

you as a teacher **really knowing the lesson plan and take home point**

so you can **provide a clear and fluent experience** in which the take home points seem to emerge effortlessly from the students themselves.

Early sessions are more specific and structured as to how student engagement should occur and positive reinforcement is given immediately for each piece of participation -- you reframe the participation if needed to allow positive reinforcement.

“**Structured and reinforced participation creates an implicit “We all do this” norm of engagement and participation,** ensures that students who are shy or less socially-skilled participate, and reduces the chance that a norm of “too cool for school” disrupts the sessions.

- **When participation is structured and positively reinforced, it clarifies for students how to do things the right way.** This helps students feel confident, which makes positive

Open Dr. Oyserman Video
Teacher Training PowerPoint Slide 17

Facilitation note:
Use Handout 1 as you go through each of the theory components.

Interpretation of Experience is Part of Pathways (Ease) (8 minutes total)

“Experienced ease is such an important concept that it is embedded in the key structural elements of *Pathways*. In which *Pathways* sessions do you see use of lay theories of what experienced ease means? Jot your thoughts down on Handout 1”

Provide time for teachers to discuss the questions. Once they have discussed (5 minutes), click the animation on the PowerPoint slide.

“Early sessions are set up to be simple yet highly engaging and fun. Doing so avoids the pitfall of the automatic link between difficulty and ‘not for me’ and **capitalizes on the automatic link between easy and ‘for me’**. The activities are novel, involve movement, there are lots of them, and the structure is very clear so that a lot happens quickly. Together this sets a tone of engaging and fun. At the same time, the activities are not particularly demanding, if you as teacher are well practiced in implementing the sessions, you can keep the flow moving.”

“For example in Sessions **1, 2 and 3, Pathways is more-teacher driven in structure and flow of activities, making it easy for students to know how to participate**. Teachers provide instructions of what is going to happen, they tell students exactly how participation will flow, and they immediately and concretely positively reinforce student responses to each of these elements of participation. This high level of clarity and structure makes *Pathways* feel easy to engage with for students. This builds student confidence that actively engaging in *Pathways* is ‘for me.’

“Sessions gradually become less teacher-driven and more student-driven in structure of participation. Think of the contrast between Session 1 and Session 4. In Session 1 you say to students “find your partner with the origami match, use the worksheet to write down a skill or ability your partner has to do well in school this year and going into next year and tell your partner your skill or ability to do well in school this year and going into next year. Then sit in a circle. I am going to go clock-wise and have each of you say the skill or ability of your partner. Then I am going to start at the opposite end of the room. Your job will be to say all the skills or abilities you have heard so far.” **Contrast that specificity with the timeline activity. Instructions are still very clear but each of you was free to draw a very different timeline**—students are free to draw timelines according to their own image as well. Producing a timeline was much more difficult than introducing a partner. **If the timeline activity comes too soon, you are going to have students who misinterpret the difficulty they experience as meaning that the whole thing of thinking about the future is just not for them.**”

Teacher Training
PowerPoint Slide 18

*Facilitation note:
Use Handout 1 as you go through each of the theory components.*

Interpretation of Experienced Difficulty (3 minutes Oyserman)

“In addition to the interpretation of experienced ease, the other lay theory we will address is the interpretation of experienced difficulty, helping students shift from the lay theory that difficulty is not for me to thinking that difficulty means important.

The link between experienced difficulty and the dominant interpretation “Not for me” is addressed in three ways.

First, practice: **you need to practice** so that delivery and activity instructions are clear and easy to understand; this reduces the chance that a “difficulty means not for me” frame is evoked.

Second, content: **activities show** students an alternative interpretation of difficulty **that is: difficulty is also a signal of value and importance**. That is what the saying “no pain, no gain” means – getting what is important in life requires hard work.

Third, structure: **the germ metaphor** is evoked because difficulty as importance is a shift from the dominant interpretation. To be sure that the dominant interpretation does not spill over, we use the metaphor of germs and getting vaccinated to protect from the spread of disease.

Fourth, repetition: We work on the alternative interpretation of difficulty as importance multiple times **using a variety of techniques**. It is okay if students do not seem to get it the first time, there will be multiple occasions to get the message.

Let me detail the techniques we use:

- “While the experience of ease needs to be constant across sessions, **ease is not enough**. At the same time that ease implies “true for me”, **people learn when they actually work on difficult tasks**, when they do things in ways that make them work rather than just coast. That means that experiencing difficulty can be a signal of importance.
- “As I just described, in *Pathways* we use the “**easy means for me**” **feeling to get students on board and engaged** and once they are engaged, **we slowly add in difficulty** and explicitly vaccinate students from the automatic “difficult means not for me” feeling and remind them of the alternative, which is “**no pain, no gain, difficulty means important for me**”
- **This means that *Pathways* activities have to get more difficult or students will feel that they are not worthwhile.** At the same time, some sessions have to deal explicitly with the ideas we just described – that failures and difficulties along the way are normal in order to make progress on important goals so difficulty can be a signal of importance.
- **We use the idea of vaccination** to explicitly tell students sometimes things that feel so difficult as to be **impossible are not, and that we can get going and start now.**
- **Here is the tricky thing.** To create experiences for students in which they interpret the session and the take home point as “this must be true for me,” you need to make even difficult sessions feel fluent so that students interpret difficulty as importance.

Open Dr. Oyserman
Video
Teacher Training
PowerPoint Slide 19

*Facilitation note:
Use Handout 1 as
you go through each
of the theory
components.*

<p>Interpretation of Experience is Part of Pathways (Difficulty) (8 minutes total)</p> <p>In which <i>Pathways</i> sessions do you see reframing of lay theories of what experienced difficulty means to focus on importance (value) rather than impossibility? Jot your thoughts down on Handout 1”</p> <p><i>Provide time for teachers to discuss the questions. Once they have discussed (5 minutes), click the animation on the PowerPoint slide.</i></p> <p>(2 minutes Oyserman)</p> <p>“We introduce the idea of difficulty a number of times – in Session 1, introduction, students engage in activities that seem difficult like the human knot but are solvable by engaging. In Session 3, positive and negative forces students consider people in their lives that may make things feel difficult. In Sessions 4 and 5, timelines, students consider obstacles and ways around them.</p> <p>These earlier sessions help normalize the idea of difficulty, life involves experiences of difficulty and even failure and getting around these and figuring out next steps.</p> <p>However, we wait until later sessions to explicitly focus on interpreting experienced difficulty as importance. Sessions 9, 10, and 11 focus on framing experienced difficulty as importance. In session 9, this is done by having students attempt to solve difficult but solvable puzzles in order to learn that difficulty does not mean something is impossible.</p> <p>-</p> <p>The metaphor of protecting oneself from infection through vaccination is used.</p> <p>That is because the everyday theory that if it is difficult it is not possible for me otherwise easily spreads. Leaving no space for the alternative everyday theory “no pain, no gain” which means that learning comes from difficulty, that making progress is likely to be hard.</p> <p>- In sessions 10 and 11, this is done by having students work to solve difficult but important real life situations to learn that difficulty is often a sign that things are important.”</p>	<p>Teacher Training PowerPoint Slide XX</p> <p><i>Facilitation note: Use Handout 1 as you go through each of the theory components.</i></p>
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Possible Selves are Part of Pathways (2 minutes)

“**Everyone has images of what their futures might hold, in multiple domains** – job and career, families and relationships, lifestyles, and community engagement. Some of these images are fantasies or nightmares, while others are possible selves. **They are possible because someone or something is a positive or negative force -- showing a model** of what to become and do or what not to become and not do. In both instances, they are motivational in that positive forces provide us support and strategies for action, whereas negative forces show one what not to do. Of course, negative forces can also be undermining --make one not want to persist when things get hard.

“**Possible selves are also possible because they are linked to strategies** - specific actions one is taking now or could be taking, especially if these actions are linked to a time and place in which they will actually occur. Thus, in order for people to have a possible self – rather than a hope or dream– they have to have a model of what to do to persist in the face of difficulty and strategies that they can use to act right now.

“In addition, **possible selves can either be near** – for example next year – **or can be far** – when one is an adult or hits retirement.

“Possible selves **can be neutral or positive expected futures** as well as **negative, to-be-avoided** or even feared futures. People have both and that is a good thing because motivation includes both”

Open Dr. Oyserman
Video
Teacher Training
PowerPoint Slide 20

*Facilitation note:
Use Handout 1 as
you go through each
of the theory
components.*

*Show on the website
where the articles
are – that way
teachers can read
more if they want to.*

<p>Possible Selves are Part of Pathways (5 minutes total) “In which <i>Pathways</i> sessions do you see the idea of possible selves? Which sessions define the term or separate it from other ideas about the future self? Jot your thoughts down on Handout 1”</p> <p><i>Provide time for teachers to discuss the questions. Once they have discussed (5 minutes), click the animation on the PowerPoint slide.</i></p> <p>“Possible selves appear in some form across almost all of the sessions (1, 2, 3, 4, 5, 6, 7, 8, 10, 11 and 12). (2 minutes Oyserman)</p> <ul style="list-style-type: none"> • In Session 1, students describe a skill or ability to do well in school in the coming year. Implied is that doing well in school is a possible self for all students. • In Session 2, students imagine their adult images and learn about domains of adulthood. These adult images are later refined so that students learn to distinguish hopes or fantasies and possible selves. • In Session 3, students consider how an adult image might become a possible self – possible because someone shows them what to do or supports them (positive force) or shows them what not to do (negative force). • In Sessions 4 and 5, students draw their timelines into the future. Each step is actually a possible self or an adult image (since the focus is on ordering, we do not make a distinction in this session set). • In Session 6 and 7, students are given examples of next year and adult possible selves and this is the first time that they are explicitly introduced to the idea of positive and negative possible selves and the thought that both are motivating. In Session 8 students link next year and adult possible selves • In Sessions 10, 11, and 12 the activities repeat the notion that next year and adult possible selves are linked. <p>In terms of which sessions begin to separate out possible selves and general adult images – or our hopes and dreams.</p> <ul style="list-style-type: none"> • Possible selves are defined first in Session 3, then the definition is repeated in Sessions 6, 7, and 8. The alternative idea of adult images or hopes or dreams is what people usually have in mind – adult images are just that, there is no defined action associated with the image.” 	<p>Teacher Training PowerPoint Slide 21</p> <p><i>Facilitation note: Use Handout 1 as you go through each of the theory components.</i></p>
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Strategies are a Part of Pathways (1 minute Oyserman)

“**Strategies are simply actions that people are taking now or could be taking now** to work toward their positive possible selves and to work away from their negative possible selves. Using the journey metaphor, strategies make possible selves into plausible roadmaps – they provide the steps from here to there. **Strategies take place in the present; they link current and future self through action paths.** They are actions people are taking now; they are immediate. Since strategies are current actions, they help make the future feel closer and more overlapping with the present.

“My research shows that **possible selves alone are not great predictors of outcomes.** Outcomes are predicted by having plausible roadmaps – that is having positive and negative possible selves about school that are linked to strategies – actions one is taking now. This is really important to repeat – possible selves need strategies; they do not work by themselves.”

Open Dr. Oyserman
Video
Teacher Training
PowerPoint Slide 22

*Facilitation note:
Use Handout 1 as
you go through each
of the theory
components.*

Strategies are Part of Pathways (6 minutes total)

Which *Pathways* sessions involve the idea of strategies? Which sessions define the term or separate it from other ideas about the future self? Jot your thoughts down on Handout 1”

Provide time for teachers to discuss the questions. Once they have discussed (5 minutes), click the animation on the PowerPoint slide.

“Strategies appear in some form across sessions (1, 3, 6, 7, 8, 10, 11 and 12). (Oyserman 1:10 minute)

- In Session 1, students describe a skill or ability to do well in school in the coming year. Implied is that doing well in school is a possible self for all students, hence the skill or ability is or could be a strategy.
- In Session 3, students learn, by talking about positive and negative forces, that there are things they could do to make adult images into possible selves. The things they learn from positive and negative forces are potential strategies for action.
- In Session 6 and 7, students are given examples of next year and adult possible selves and asked to link them to strategies they are doing now or could be doing. This is the first time that students are explicitly introduced to the idea of strategies as necessary.
- In Session 8 students link next year and adult possible selves through strategies and link these strategies to a time and place. This is the first time students are asked to really commit to the specifics of a strategy.
- In Sessions 10, 11, and 12 the activities repeat the notion that next year and adult possible selves are linked through strategies.

“So strategies are defined first in Session 6, the definition is repeated in Sessions 7 and 8. The alternative idea, which is that adult images or possible selves just happen, is gradually replaced with the more specific action focus.”

Teacher Training
PowerPoint Slide 23

*Facilitation note:
Use Handout 1 as you go through each of the theory components.*

<p>Pathways Active Ingredients (1 minutes)</p> <p>“As we have just walked through in detail, <i>Pathways</i> brings together the theoretical components of the future as a journey, interpretation of ease and difficulty, possible selves, and strategies. <i>Pathways</i> activities touch on the three active ingredients repeatedly across the 12 Sessions using the journey or path metaphor. The three active ingredients are:</p> <ul style="list-style-type: none"> • First, making the future self - possible selves feel connected to the present; • Second, making relevant strategies feel like something one can do now; and • Third, framing experienced difficulty as a signal that a task is important rather than impossible for oneself. <p>“The sessions build on one another. Each active ingredient is presented in different ways in multiple sessions. This allows students to experience the active ingredients multiple times in different ways and means that students do not have to master an active ingredient in any one specific session. This means you can focus on session pace since keeping pace keeps students engaged.</p> <p>“You can find an overview of which active ingredients are the focus of each session in your Implementation Manual. This is a useful guide so it is also on the Website and you should be seeing now on your PowerPoint.</p> <p>“As a final point, notice, that some core concepts --the path or journey metaphor and the idea identity is dynamic and not fixed -- help you as a teacher to understand how change works they are not taught explicitly as constructs to students because the abstract concept won’t help them.”</p>	<p>Teacher Training PowerPoint Slide 24</p>
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Manual Dissemination and Set up for Weekly Call-ins (10 minutes)

<p>Material Dissemination (5 minutes)</p> <p>“I have opened up the <i>Pathways</i> website, am passing out your personal copy of the <i>Pathways</i> Implementation Manual. I will leave the website up during lunch if anyone wants to click through on their own. We are going to spend the half hour after lunch going over the overall structure of the <i>Pathways</i> program and showing you how the <i>Pathways</i> website and <i>Implementation Manual</i> reflect this structure and key features of the <i>Pathways</i> website and <i>Implementation Manual</i>.</p>	<p>Teacher Training PowerPoint Slide 25</p>
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Set up for call-ins (5 minutes)

“Please take out your personal device and follow these instructions. You will be doing this each week for your weekly check in for the 6 weeks of *Pathways*”

*Facilitation note:
Need a logging into skype or gotomeeting or hangout handout for teachers to follow, depending on what you have access to. This handout is discussed in training materials.*

Lunch (30 minutes)

LUNCH BREAK (30 min)

*Facilitation notes:
Limit lunch to 30 minutes. If you go over 30 minutes, it will be difficult to get back on track and you will not accomplish all you need to do in Day 2. Check your parking lot to see if other questions have emerged*

Homework (5 minutes)

<p>PTS Homework (1 minutes)</p> <p>“Tomorrow, each of you will implement at least one session <i>[ideally two or more]</i> Pathways sessions with your peers and get structured feedback. I have listed the sessions each person will prepare as homework to deliver tomorrow.”</p>	<p>Teacher Training PowerPoint Slide 26</p>
<p>Homework Assignment (4 minutes)</p> <p>“For each assigned session follow these prep tips:</p> <ol style="list-style-type: none"> (1) Pre-test yourself: Ask yourself – what did we do in this session? What do I think the take-home point was? (2) Check your understanding and recall: Watch the video of Dr. Oyserman implement and explain each of your assigned sessions. (3) Note any differences between what you recalled and saw. (4) Thoroughly review the implementation manual and check your understanding of the take home point and flow of action as well as the text to deliver. (5) Use the prep tips handout/checklist from the implementation manual introductions. <p>“Be prepared to implement in the morning!”</p> <p><i>Provide list to teachers</i></p> <p>“Do you have any questions about the homework assignment?”</p>	<p>Teacher Training PowerPoint Slide 27</p> <p><i>Facilitation note: Be sure to have prepared the sessions that each teacher will implement so that you are not figuring out which sessions teachers will implement on the fly.</i></p>

Session organization (45 minutes + 5 minute break)

Take home point

- Each session is scripted in ways that weave each of the IBM components in a stepwise fashion, repeat a common metaphor, and focus only on the core message rather than all possible interesting side issues

<p>Introduction to Session Organization (1 minutes)</p> <p>“You experienced <i>Pathways</i> as a participant and we talked about translating the theoretical components into Pathways. Now we are going to look at the organization of the <i>Pathways</i> sessions. As you will see, there is a common organization – this helps with the experience of ease. In addition, the organization itself structures learning, as we will talk about. To do this, we will first talk about how <i>Pathways</i> is structured to support active engagement. Although <i>Pathways</i> is scripted to ensure you understand the how each activity supports the active ingredients and take-home points, the goal is not to sit and read a script to students, but rather engage them in the activities so the take home points emerge from their own words. This is why it is key to be prepared and understand the take-home points well enough to bring them out from students.”</p>	<p>Teacher Training PowerPoint Slide 28</p>
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Action & Active Participation (8 minutes)

“As we talked about before lunch, Identity Based Motivation theory is about increasing the chance that students will see school now as their path to their adult possible selves so that they will take relevant action and see schoolwork as meaningfully link to their adult possible selves. Active learning results in better recall, so each session has a deep organization that is consistent - feels easy - even though the activities differ from session to session.

“The activities in *Pathways* make the abstract idea of ‘future time’ into something concrete ‘a journey or path to my future’. At the same time, *Pathways* incorporates core lessons from cognitive and social psychology about how people learn and how they remember. These lessons are **first, if something is mentally tagged as self-relevant while it is being learned, people are better able to remember it later**. For example, *Pathways* structures an experience of ease is that take-home points are framed in the course of positively reinforcing student participation so that they emerge seemingly organically from the students’ own words. In each session, teachers use students’ own examples and feed them back using the Pathways language so that take home points are experienced as emerging naturally from students. This is a difficult process for teachers; you need to be really well versed in the take home points in order to do this. But if you do it well, it will feel easy to students. **In other words, sessions are organized so that students feel as though they are driving the action.**

“**Second, people concentrate in chunks of about 15 minutes and do best if they can move around or shift attention after about that amount of time.** Thus, *Pathways* activities are structured to be around 15 minutes. There are times when activities are longer than 15 minutes, for example when students create timelines. However, the majority of activities in lessons, including discussions, should not run past 15 minutes. Make sure to use the time stamps within the manual to keep up the pace.

“**Third, people are more likely to be able to later recall and use knowledge that they learned actively** – by doing something and explaining it to others, by recalling and trying to apply it to another setting. Each session starts with student recall of the prior session and teacher link to the current one. This makes it easier to recall Pathways, and if it feels easier, students are more likely to not only remember, but use the content is easy and equals for me.

“**Therefore Pathways is organized with each of these points in mind.** There is lots of action. The core concepts come up in different guises, which students discover on their own to varying degrees and with varying speed, they are explaining things to one another, their own words are used to define terms and highlight take home points, insuring that the content is experienced as self-relevant or about me. Instead of being told what to think or told to make a specific plan to embark on a specific career, students learn to feel a sense of ownership over their new outlook on the future as a path or journey, which they experience as starting now.”

Teacher Training
PowerPoint Slide 29

Facilitation note: To concretize this, you can have teachers looking at the implementation manual to see the time estimates and flow of action to see examples of the elements described here.

Changes in Session Organization (3 minutes)

“In order to support active engagement, and to insure that students feel a sense of ease, the way that activities are structured varies slightly to maximize student reinforcement. **Early sessions are more specific and structured as to how student engagement should occur and positive reinforcement is given immediately for each piece of participation, which is reframed if needed to allow positive reinforcement.** Structured and reinforced participation creates an implicit “We all do this” norm of engagement and participation, ensures that students who are shy or less socially skilled participate, and reduces the chance that a norm of “too cool for school” disrupts the sessions. **When participation is structured and positively reinforced, it clarifies for students how to do things the right way.** This helps students feel confident, which makes positive reinforcement easy, which creates a positive cycle of engagement. **Positive reinforcement in later sessions can then be more focused on reflecting back content, applying content to the core *Pathways* concepts,** giving students the experience of actively engaging with Pathways concepts and applying them to new situations and problems. However, continuing to reinforce engagement itself is important and rewarding”

Teacher Training
PowerPoint Slide 30

Overall Organization (30 minutes)

“Prior to going through the manual, we want to start by reviewing a lesson, and then discuss how we see each of these components within the lesson. As you watch the lesson, and as we discuss, review your *Implementation Manual*.”

Prior to starting the script, as a group, watch Session 3, Positive and Negative Forces

“Each *Pathways* session has the same underlying organization. **This is designed to increase student’s experienced ease and hence sense that *Pathways* is “for me” while at the same time introducing content in ways that builds from session to session to create a core knowledge structure that students are skilled at pulling from memory and using in new situations.** The organization is a sequence of five parts. In each session, **the first part** of the session is welcoming and linking. You begin by welcoming students, saying the name and number of the session, and eliciting student recall of the prior session with the goal of linking the current session to what occurred in the prior one. **The second part** of each session is introducing the new concept. To do that you name the concept for the session and elicit student discussion to obtain examples, and their current knowledge about what it is and what it means. You reinforce their knowledge and connect that to the definition to be used in the session. **The third part** of each session is a structured activity that uses the new concept. The activities were designed so that students do something different each session and create some product that is their own. **The fourth part** of each session is a targeted discussion of the product. Your task is to know the take home points well so that you reinforce those points as they emerge and synthesize specific student responses to those main points. This allows students to experience themselves as generating key takeaways. **The fifth part** of each session is so brief that you might not notice it. This is the last part of each session in which you briefly note what was done and the takeaway in the session and name the next session.

“We will discuss, each of these steps in more detail. The only exceptions to this organization are in the first session, which begins with an initiation or introduction since there is nothing yet to link to, and the last session, which ends with giving students a certificate for completing the program since there is no next session to link to. So let’s discuss each part in more detail and how we saw each component in the video and in the *Implementation Manual*.”

“**Initiate.** The first session begins with a welcome, orientation, and series of activities designed to form a group identity, create a participation norm, highlight link between program aim and student-driven expectations and student-driven rules for the road, Building the Road for the intervention and ensuring all students are participating.

“**Linking to prior sessions.** Each session (except the first one) begins with a welcome, naming the session name and number, hanging the agenda, and asking students to recall the prior session and using their language to link the upcoming session activities to the prior session

Teacher Training
PowerPoint Slide 31

*Facilitation note:
This slide will be interactive in that you will first watch a video, and then you will take the part in turns, asking participants to reflect back on the lesson and their implementation to see how they saw each organizational component within the lesson.*

<p>Concluding Organizational Comments (3 minutes) <i>“Pathways has a particular character and as I have shared with you, it comes from research on the active ingredients of Pathways and research on how students learn and remember and later use the material.</i></p> <p><i>“We talked about how people interpret their experiences of ease and difficulty and showed you the very detailed way in which sessions are broken down to make sure that the flow and content are present and also to make sure that student voices are dominant in framing and delivery of the take home points. Making Pathways feel easy and fluent takes hard work and prep on your part”</i></p> <p><i>“This might be similar to or very different from your practice preferences in your other classes and you may need to push yourself to implement practices supported by Pathways. Do not worry. In the pilot testing we had students rate their subject teachers in terms of their warmth, clarity, knowledgability, and caring when the teacher was teaching their subject and when they were delivering Pathways. Even though teachers felt less expert in their first time delivering Pathways, the <i>Implementation Manual</i> and other supports meant that students saw them just as positively in Pathways as in their subject.</i></p>	<p>Teacher Training PowerPoint Slide 32</p> <p><i>Facilitator note: Show participants that it looks easy and is meant to feel easy to students, but that getting their takes prep work</i></p>
<p>Break (5 minutes)</p>	

Manual and Website Familiarization (50 minutes)

Take home point

- The manual and website are linked and detailed. If you use them you will succeed.

<p>Manual and Website Familiarization (1 minute)</p> <p>“Pathways is manualized (<i>show Implementation Manual</i>). It comes with multiple resources, including videotape of each session, of which we already viewed one, in which each session is delivered to a classroom of students in real time with student movement and activity engagement. Each video is edited so that the movement is seen but in double time so you are watching no more than about 15 minutes each time. The <i>Implementation Manual</i> and <i>Pathways</i> website provide you with each session’s take home point, pointers for delivery, the PowerPoint deck to use, and all handouts and materials, including in Spanish.</p> <p>“To insure that you can use the manual effectively, we are going go over the organization of the website and manual. The manual was initially published in book form and has undergone careful revision each year as part of teamwork with Chicago Public School teachers. The website was developed for teachers and has also been revised following Chicago Public School teacher comments. I think you will find both extremely helpful and that is why we are going through them now.”</p>	<p>Teacher Training PowerPoint Slide 33</p>
<p>Manual Organization (9 minutes)</p> <p>“The <i>Implementation Manual</i> contains six sections.</p> <ol style="list-style-type: none"> 1. The first pages provide an introduction to <i>Pathways</i>, the key ingredients, and an overview of each of the sessions, showing how each session relates to prior sessions and forthcoming sessions. 2. Pages xx provide session pointers to promote successful program implementation. 3. Pages xx are Sessions-At-A-Glance, which are one-page overviews of each session. You should practice with the scripted pages. Once you are fluent with the content of a session, you can have your manual open to the one-page overview to stay on track. 4. Pages ss are the Session lessons. Each provides detailed information on how to implement each session. We will go into further detail about each session lesson in a moment. 5. Pages ss are the FAQs, Frequently asked questions about <i>Pathways</i>. 6. Pages xx are pictures of the suggested room set-ups to help you visual what the classroom structure should look like and how students should be situated relative to one another whether or not you do not have classroom furniture that is easily movable. 	<p>Teacher Training PowerPoint Slide 34</p> <p><i>Facilitator note: Use the manual as you go through the various sections, giving time for teachers to look at each section prior to moving on to the next section.</i></p>

Website Organization (20 minutes)

Website: <http://www.pathwaysintervention.com/>

“The website contains everything that is in the *Implementation Manual* and more. In response to frequently asked questions, **Dr. Oyserman created a series of brief video clips explaining each of the core terms we discussed** [*click on where they are*], **brief video clips explaining the basic theory of identity-based motivation and the aim of Pathways**, the pain point we just discussed [*click on where each of these are*]. She also included links to published research and more detailed presentation of the theory and results [*click on where they are*].

“**The website includes a place to go for each session.**

It provides a videotape of Dr. Oyserman, implementing each session with a classroom of Chicago Public School students. The videotape includes text overlay of pointers for running the session. You should watch the videotape as part of your prep. The videotape is sped up in sections so you see the full session but spend no more than ten minutes seeing and hearing instruction and interchange.

Next to the videotape is a click button for **examples of student products** from that session

These help you visualize where you are going.

Next to the videotape is a click button for the session **PowerPoint deck** so you can use it in class as well as a Smart Board version of the **PowerPoint deck**. If you want to use your Smart Board to do the cluster on the board sections in each session.

There are also clicks button for the **manual** for that session, and for **the handouts** for that session.

For prep next to the videotape there is also a click button with a **video clip of classroom teachers describing key pointers** for that session.

“I clicked on each element as we discussed it. You will have a chance to do this on your own later. Using the video materials is important for quality delivery so that you are not relying solely on your memory of our work together.”

Teacher Training
PowerPoint Slide 35

Facilitator note: Use the website as you go through the various sections, click on each part that you mention

Using the Implementation Manual (3 minutes)

“Now let’s discuss the key components of the manual that help you implement *Pathways*.”

“**The implementation manual lays out the specific pieces of each session, including what you and your students are doing at all times.** Time is tight. Following the manual is critical to delivering the active ingredients and successfully helping your students master them. This does not mean you have to read verbatim from the manual to enact the lesson. It should feel natural and that this must be true. **You can do this. We know this because it was tested and the average teacher can do it.** During testing, teachers were videotaped and observers used checklists like these [*show examples of fidelity check list and rating of quality of deliver*] and students rated themselves on the active ingredients [*show example of the student end of session active ingredients check list*]. Taking all of these very specific observation points into account, we found that the average teacher teachers were generally able to implement the program as intended when they properly prepared and followed the implementation manual and that those who implemented as intended had students with positive changes.”

“In addition to **descriptions of the activities, the implementation manual contains a variety of tools to support teacher implementation.** These tools can be found on page four of your implementation manual, and we will go through them briefly now. If you want you can go through the lesson that you will implement tomorrow and find the various tools to see what they look like in practice. Your choice.”

Teacher Training
PowerPoint Slide 36

Facilitation note:
Use page 4 as you go through the symbols or through an actual lesson. For example, you may want to ask them to go through the lesson that they will implement tomorrow.

Using the Implementation Manual (6 minutes)

Session Overview and Connections. The first page of **each session contains a small flow chart that details how the session fits with what came before and what will follow.** This makes it easy for you to quickly remind yourself about how the current session can best be framed to fit into the broader Pathways journey as you introduce each session.

Key Take Home Points. The take home points are outlined in green boxes on the first page of each session—these are the key ideas that should guide the session. **The key take home points reflect at least one of the three active ingredients.** Remember, take home points are to be delivered primarily via your positive reinforcement of student statements so that students can see how the points arise organically from the experience students are having.

The key take home points are further broken down into points for reinforcement. These points for reinforcement are in purple boxes on the first page of each session. These points focus your attention to important elements during specific moments or interactions with students. **In other words, points for reinforcement should guide your responses to questions and how you frame of activities.** The take home points broadly guide the structure of each session.

The reason for highlighting the points for reinforcement in the implementation manual is that students will say many interesting things during each session that should not be followed up on because they do not relate to points for reinforcement. Failing to do this will result in “missing the forest for the trees.” **That is, students will end up having an experience but not all experiences actually fulfill the goals of helping students see the present as linked to the future and difficulties as part of the process.** Indeed, many experiences, though engaging, will not actually help students in these ways at all and may even be harmful if you try to dig too deeply and as a result students either confide things that should be left private (this is not counseling) or feel pressured to develop a career path instead of actually attaining the *Pathways* skill set, which will be useful no matter what career path they might choose. Moreover, time is tight; spending more time on some parts makes for too little time on other parts and undermines the fluency of the process, which is needed for students to be able to learn and remember later. **Finally, people have a limited capacity for how many new things they can learn and remember at the same time, adding new details might seem enticing, but overloading students just reduces how much they can process the three core elements of *Pathways*.**

Agenda and Time At the beginning of each session, you will find the agenda, which comes on the PowerPoint slide and also comes printed on a large sheet, so it will be easy to reference throughout the session. **The agenda keeps you on track, shows students where they are in the process, and highlights the idea of a path or journey in each session.**

Teacher Training
PowerPoint Slide 37

Facilitation note:
Use page 4 as you go through the symbols or through an actual lesson. For example, you may want to ask them to go through the lesson that they will implement tomorrow.

You may also want to have the manual up on the projector so that you can point to each section within a session as you go through them.

Using the Implementation Manual (6 minutes)

PowerPoint. In the Sessions at a Glance, you will see bubbles that serve as a reminder to use the PowerPoint slides. **The sessions have pictures of the actual PowerPoint slide to serve as a reminder.**

Facilitation notes. These are yellow and aim to support you by highlighting things that will make the session run more smoothly. **Many of them give advice on how to elicit participation and provide positive reinforcement.** Others provide a heads-up for the kind of things students might say, or advise teachers on how to give instructions, set-up the room, or focus the class discussion. For example, a facilitation note at the beginning of a session might provide you instructions on how to use active ingredients within the activity, helping to prime students to notice key points as they complete the activities, and making it more likely that they will remember and use these ideas later.

Points to Reinforce. These are green and aim to remind you of what you are **looking for to reinforce as you move around the room and circulate among students.** These boxes help you see opportunities to emphasize the key take home points and the points for reinforcement referenced at the beginning of each session.

Positive reinforcement can occur in group share out, when you are circulating, and any other time. Positive reinforcement links what the student said to a key point, reinforcing that student for participating, helping all students see the key points in their own language, and increasing student confidence that they have skills and abilities to do well in school and figure out ways around roadblocks. For example, if during session 8 a student mentions a strategy that can be done that day, a teacher can positively reinforce the comment by saying, “Great job naming a strategy—yes, strategies are actions that you can take right *now*.” **This can be done in one-on-one conversations or when teachers are organizing student responses in a single large group.**

Caution Warnings. Caution warnings are outlined in red. **They are rare and used only to highlight pitfalls that emerged from pilot testing of Pathways.** If you have watched the video and read the implementation tips and focused on the underlying structure as we have discussed, you should not be taken by surprise. Caution notes are only placed in parts in which teachers might be tempted to do something that is not helpful and that would sidetrack or undermine students’ ability to focus on the main point. For example, in Session 4: Timelines students sometimes struggle with what to put on their actual timelines into the future, and you may want to direct them to specifics of what they should include. We added a caution note not to do that, and to let students determine what their steps will be.

Handouts. A picture of the associated handout is provided whenever a handout is needed for a *Pathways* activity

Potential Modification. These are brown and aim to facilitate on-

Teacher Training
PowerPoint Slide 38

Facilitation note:
Use page 4 as you go through the symbols or through an actual lesson. For example, you may want to ask them to go through the lesson that they will implement tomorrow.

You may also want to have the manual up on the projector so that you can point to each section within a session as you go through them.

<p>Questions about the Manual (5 minutes)</p> <p>“Do you have questions about using the website and manual that you would like to ask before we turn to tips for preparation and give you your homework?”</p>	<p>Teacher Training PowerPoint Slide 39</p> <p><i>Use your judgment about answering questions about the manual. This is a tight agenda, so try to limit the conversation 5-10 minutes.</i></p>
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Guidelines and Tips in Prepping for and Delivering Pathways (10 minutes)

Take home point

- Demonstrate how teachers need to prep so that they do not fall prey to misinterpretation of experienced ease

<p>Guidelines and Tips in Prepping for and Delivering Pathways (1 minute)</p> <p>“It is critical to prepare for each lesson. You will have trouble implementing if you are not prepared. The content should feel obvious and clear to you after participating in <i>Pathways</i> program yourself, but to produce that result, you need to prep or you will lose speed and momentum and leave you students unclear as to the take home points.”</p>	<p>Teacher Training PowerPoint Slide 40</p>
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Guidelines and Tips in Prepping for and Delivering Pathways (9 minutes)

“Over the years, we have asked the teachers who done well to share with us how they used the *Pathways* website and Implementation Manual to prep and I am sharing these with you.

- **Know the core constructs.** You need to define terms with students by first asking students what they know about the construct, and linking term to their own understanding. This works best if you really know the constructs yourself.
- **Keep track of what students say.** The more you remember what students said the prior sessions, the more you can connect back to it and form deeper relationships with your students.
- **Prepare each lesson independently.** To do this, **pre-test yourself.** You will be surprised at what you do not remember and this targets your prep. **Watch the video** after you self-test. Then you have the whole flow in your head, know what to pay attention to, and you can visualize how the key points are delivered. In addition, **read the one paragraph overview of the session logic in the manual.** Then you know what you are trying to do. Finally, **read the teacher talk in the manual a few times** out loud to yourself. You need to be able to say it fluently in your own words. Review the PowerPoint, agenda, and the key Pathways terms for the week. Some teachers chose to copy the pages needed for that week, which is also available by session on the website, and highlighted it in different colors.
- **Read the text boxes, not just the Teacher Talk.** That is where the take-home point, facilitator notes, points to reinforce, and cautions are located. This helps you problem solve concerns teachers typically have during implementation.
- **Use the one page session at a glance or a copy of each session.** Instead of carrying the whole session, you can make a copy of each session (also available on website), and highlight in different colors the teacher talk. *The session at a glance is useful* to look at right before students come in and to have on the desk as you are going forward. It is not instead of using the script, but it is a way to make sure you are following your script as an easy check in.
- **Talk about Pathways and explain what you are doing with other teachers--**the more you explain it to others in your building the easier it will be to use it and the quicker you will catch your own mistakes. Practice your terms so that you are using them fluently.
- **Check your materials.** The day before, check the materials and put them by your desk, and make sure all the physical prep is ready. Use the checklist from the materials section and check that you have the right number of copies for each handout prior to implementation.
- **Do not be the obstacle for your students.** If you have not prepped enough, you won't let them learn. If the personality of a student is difficult, ask yourself how you work with this personality in a way that connects this student and the whole class back to the lesson.

Teacher Training
PowerPoint Slide 41

Facilitation notes; If teachers push back on some of these components, you might want to approach it by saying “I understand that this is different and I am asking you to try.” Talking in this way can increase the trainer’s credibility.

PTS Logistics (15 minutes)

<p>PTS Logistics (1 minute) “Before heading out we have two logistics pieces.”</p>	<p>Teacher Training PowerPoint Slide 42</p>
<p>Implementation Logistics (14 minutes) “First, when will you implement the Pathways program? Second, when will we have our weekly call-ins?”</p>	<p>Teacher Training PowerPoint Slide 43 <i>Facilitation note: Have ready a school schedule on your PowerPoint. This should have been prepared in advance (see Trainer Tasks After Participants Leave following Day 1.)</i></p>

Adjourn (1 minute)

<p>Adjourn (1 minute) “Thank you! We experienced Sessions 10 to 12 of <i>Pathways</i>, learned about the theoretical basis and empirical evidence, got familiar with the <i>Pathways</i> website and manual, discussed general implementation tips, and gave you homework. Tomorrow you’ll present and get feedback to build you up and give you implementation tips”</p>	<p>Teacher Training PowerPoint Slide 44</p>
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End of Day Trainer Preparation for Day 3

At the end of Day 2, ensure that you have the directions prepared for the pre-training activity, as well as copies of the fidelity measures for teachers to use.

DAY 3

Day 3 starts by welcoming back the teachers to the training and noting the agenda for the day. Then teachers are divided into the groups set in Day 1, one group per trainer, and have teachers lead their sessions, each session implementation will take 10-15 minutes and feedback will take another 10 minutes. Throughout the day, your feedback is both specific-- what the teacher did or missed using the fidelity checklist and quality of delivery checklists, and general --implementation tips for educators.

When you provide feedback to teachers, use the points for reinforcement in the notes below to mention those aspects of each session the teacher did well and the ones missed. Frame your positive reinforcement terms of what teachers actually did –modeling how you want them to positively reinforce their students. To facilitate this process, use the Fidelity Checklist and Quality of Delivery Measure (both of which can be found on the website). The Fidelity Checklist will help guide you in determining what aspects the teachers implemented well and did not implement well.

Pre-Training (30 minutes) Breakfast

<p>Breakfast and Get to Know You Exercise</p> <p>As people enter the room, let them grab breakfast. But also let them know that they will be sitting next to the individuals who are implementing the same lesson as them. Have the teachers review the session(s) together, including the take home point, points for reinforcement, and ways in which they ensure participants will engage in the activities in which they will feel that the take home point “feels as though this must be true.”</p>	<p><i>Provide directions on the get to know you exercise.</i></p>
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Welcome and Introduction (2 minutes)

<p>Pathways to Success Teacher Training – Day 3</p> <p>“Welcome to the <i>Pathways to Success</i> Teacher Training, Day 3. Today’s agenda builds on Days 1 and 2 – experiencing <i>Pathways</i>, unpacking the structure, learning about the theory and research.”</p> <p>“<i>[Review Agenda]</i> Today you will implement the sessions you were assigned yesterday and worked on last night. We will have approximately 20-25 minutes to implement the session and provide feedback. We will take no more than 10 to 15 minutes for implementation and then provide you with 10 minutes of positive reinforcement and constructive feedback to help you build on your strengths and answer any questions anyone has about the session. Because the sessions are shortened, we won’t spend as much time engaging in the actual activities, but practicing how to set up each session using the universal structure of each session, provide clear instructions and obtain student driven definitions and use discussions to positively reinforce and highlight the session take home point. We will provide facilitation and implementation tips as we go. Similar to Days 1 and 2, turn your devices to silent and put them away so that we can get started.”</p>	<p>Teacher Training PowerPoint Slide 45</p> <p><i>Facilitation note: Have copies of the agenda for each day to review or write on newsprint</i></p> <p><i>Facilitation note: Prior to starting Day 3, it might be helpful to have participants in their groups to reduce time for the group to transition.</i></p>
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Facilitation Tips (8 minutes)

Take home point

- To support a sense of ease for *Pathways* teachers, it is important that they not only know the material well, but understand ways in which to effectively facilitate the session and reinforce take home points so students experience the session as “this must be true.”

Facilitation Tips (2 minutes)

“Before we begin implementation of sessions, let’s review some general facilitation tips that help you align successful implementation of Pathways with teaching practices you already use. **Pathways is scripted in ways that builds in a good pedagogy, insights from learning science, and potentiates your ability to use all of your expertise in facilitating dialogue.** To remind you, the goal is not to necessarily read the script verbatim but to ensure that you ensure students understand the take home points from student’s own words, creating an experience that students believe that the activities must be true for them.”

Teacher Training
PowerPoint Slide 46

(stay in groups)

Create Classroom Social Norms of Participation (2 minutes)Teacher Training
PowerPoint Slide 47

“A key component of *Pathways* is to **create a classroom norm that participation is expected and a regular part of how classrooms function**. When others around you are participating, it creates a sense that your own participation is possible, easy, and desired. Research on social norms also demonstrates that, as one might expect, **people tend to act in ways that fit with how others are acting**. Thus, participation leads to more participation, and more of a sense that things are possible.

There are a few areas that teachers should focus on when it comes to creating participation norms.

- *Follow the room setup guidelines so students can see each other and move in the classroom.* The movement in the classroom matters. **Setting up the room properly is an extremely important, but often overlooked, element in effective intervention implementation.** In each session, the room setup should allow students to face each other and share their work with the class—this makes participation smoother by making it easier to partner up, and it ensures that students see their classmates engaging in the activity. Proper room setup also creates a path for teachers to move from one student to the next so they can offer assistance and keep students on track. At the end of the day, take a few minutes to make the room look clean prior to *Pathways* so the space feels ready for it; your room has to look like *Pathways*. Use the room you have with its limitations.
- *Create the sense that students have choice.* There are many opportunities to modify activities (e.g. letting students decide whether to work in groups of 3 or 4), and **giving students choice reinforces the norm that they are active participants in what is occurring in the classroom.** Alternatively, if a student feels they don't have choice, this may create reactance and the desire to assert autonomy by rejecting what is being asked.
- *Use and repeat student responses to evoke key points.* **If students feel they are involved in generating the big takeaways, each time those points are repeated over the course of the intervention students will be reminded of their central participatory role.** In addition to the positive reinforcement route, another way this occurs within *Pathways* is when you cluster on the board.
- *Create clear guidelines for participation:* Make sure that students know how participation occurs (clockwise, counterclockwise, from the middle) and **what participation entails**, make it seem simple and straightforward rather than something that has to be chosen effortfully.

<p>Reinforce Positive Behavior (2 minutes)</p> <p>Both the experience of ease and participation norms can be bolstered through positive reinforcement, which gives students the sense that they are engaging in activities and succeeding. Positive reinforcement should follow a series of guidelines:</p> <ul style="list-style-type: none"> • <i>Positive reinforcement should target a specific task-related action or statement.</i> Being specific ensures that students are able to connect the positive reinforcement with the specific behavior that elicited the positive reinforcement. • <i>Positive reinforcement should be prompt.</i> This makes it clear to all students exactly what was exemplary and it preserves the flow of the activity. • <i>Positive reinforcement should be given to both speakers and listeners.</i> Reinforcement for good listening helps ensure that students understand what they are doing and that discussions remain free of disruptions. • <i>Something doesn't need to be perfect to merit positive reinforcement.</i> Partial answers are still worthy of commendation and can provide an opportunity to get other students involved. 	<p>Teacher Training PowerPoint Slide 48</p>
<p>Emphasize and Repeat Key Points (2 minutes)</p> <p>“Despite the teacher’s best efforts it is likely that at some point over the course of a session the attention of some students will wander. If students happen to miss key points when they are first explained these student will feel lost and have an experience of difficulty when these points are referenced later. Therefore, teachers should make an effort to clearly and consistently evoke and explain key points. Consistently brining the focus back to key points also provides additional opportunities for students to suggest the points themselves or for the teacher to connect the key points to student-generated examples.</p> <p>“The importance of emphasizing key points is supported by data from pilot studies of Pathways. Analysis of classroom observations from trained observers suggests that a teacher’s ability to repeatedly emphasize key points in a clear way is associated with positive intervention outcomes. “</p>	<p>Teacher Training PowerPoint Slide 49</p> <p><i>At this point, you will need to transition to the Implementation PowerPoint slides</i></p>

Teacher Implementation of Pathways Sessions 1-7 (2 hours 55 minutes + 15 minutes of breaks)

Session 1: Introduction to Pathways to Success (25 minutes, teacher led)

First have teacher implement Session 1

After teacher completes lesson, reinforce the following:

“This session is crucial because it builds the path. But you will hear me say this for each session—that is because every session is pathways is crucial. Not only that, but each session provides the basis for the session that comes after it. That is why we are very focused on making sure you know the key point and you know how to deliver it so that it feels true. Getting a derailed train back on the track is much harder than keeping a train on the track, to use a journey metaphor. If students do not have a norm of participating, if they do not believe that everyone in the class has a skill or ability to do well in school, if they do not think that the goal of *Pathways* makes sense and fits their own concerns and expectations and do not know that Pathways is a safe space because there are rules, then nothing else will work well.

“A secondary goal of this session is to create a group identity. Making clear that students are on a journey with others helps build a supportive climate, as it makes clear that helping others can help make *your* group successful. A group identity also makes it more likely that a norm of participation will develop, as the failure to participate may come to be seen as letting group members down.

“When you implement this session, make sure to:

- Repeat what each student says and then actively link it to the core message
- Make sure that your origami cards are shuffled (and that you have pre-counted the correct number of pairs)
- As students are speaking to each other, one is writing and the other is speaking. Make sure this is occurring. Circulate and make sure that what they are writing is a skill or ability.
- Throughout the session, ensure that students feel as though Pathways will be a place where they have their voices heard, and they will learn from one another.

“High level implementation looks like *(share the quality of delivery information description).*”

Implementation
PowerPoint Slides

Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each point to reinforce based on their implementation

Facilitation note: As you go through each session ensure you hit the following points:

- *Provide specific feedback on each of the core points*
- *Provide specific feedback on positive reinforcement*
- *Make sure to orient participants to the action at the moment*
- *Highlight take home point*
- *Create a sense of ease*

<p>Session 2: Adult Images (25 minutes, teacher led) <i>First have teacher implement Session 2</i></p> <p><i>After teacher completes lesson, reinforce the following</i> “This session is crucial because nothing will happen if students do not believe that they and everyone else in the classroom has some image of adulthood – that there is something more distal that they want. Adult images are not career plans and no one is going to be held to what they said, the point is that there are domains of adulthood and everyone wants some future.</p> <p>“When you implement this session, make sure to:</p> <ul style="list-style-type: none"> • Be explicit about participation rotation so students know • Get each student response and put each on the board to cluster by domain of adulthood. If a response fits in two places, write it twice • When asking students about the clusters, be sure to use their words rather than tell them the domains so students experience themselves as generating the domain names • Know that it is common for community engagement to come up in a later session, wait to mention it until later • Help students make the connection that the job domain fuels the other domains. • For adult images, there is an option to have students write what the images mean to them, do that if your students need structure to stay focused and if you want them to have a physical trace of what they said this time. <p>“High level implementation looks like <i>(share the quality of delivery information description).</i>”</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation</i></p>
<p>Break (5 minutes)</p>	

Session 3: Positive and Negative Forces (25 minutes, teacher led)

First have teacher implement Session 3

After teacher completes lesson, reinforce the following

“This session is crucial because it is the first session in which students shift from adult images as just wishes or fantasies to possible selves – in this case possible because of positive and negative forces that show students how to do or not do things, provide support or criticism. What is critical is giving students space to note both positive and negative forces and to link these to their own possible self in the domain of work and career. Students may need help in scaffolding from their adult images a job or career.

“When you implement this session, make sure to:

- Connect back to specific examples from Session 2
- Write student definitions on the board, as it is easier for the students.
- Do not assume that you know what a student means. Have the student explain, this both yields better engagement and allows students to learn from one another
- Do not be afraid of serious negative content, but keep it focused on the message at hand, this is not therapy
- Link back to Session 2 Adult Images in ways that are helpful rather than constricting. If someone wants to travel the world, the job or career might link to that – have flexible hours or require travel and so one. The idea is not to pin students to whatever job or career they might have mentioned in Adult Images in part because the *Pathways* lessons are much broader than getting to a job I happened to pick on a day in 8th grade.
- Have students do the legwork, if they have jobs; they are the active leaders, not just you.
- Notice that the job and career possible self does not have to be a specific one, it is at the level at which the student can specify, linked to the domains of adulthood that matter to him or her
- Some jobs may not sound like a job to you, such as chess champion, but the student may believe that it is, and that is fine
- Make sure to keep the pace going so that everyone participants. For example, be sure that ideas that are repeated are acknowledged. You can do this by putting a check or numbering so that the student is heard. Yet at the same time, new ideas are given space. Similarly, make sure that you clarify to students how the session is proceeding
- Keep in mind that the end of Session 3 is the first time that interpretation of experienced difficulty arises. Positive Forces remind students that important things are difficult. Negative forces misinform students that difficulty means that a student can just quit trying.
- Help students recognize that both positive and negative forces can be motivating, where positive forces model that you can persist when you feel like you can’t, and negative forces make you feel like you can’t persist when things get hard.

Implementation
PowerPoint Slides

Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation

<p>Session 4: Timelines, Part 1 (25 minutes, teacher led) <i>First have teacher implement Sessions 4</i></p> <p><i>After teacher completes lesson, reinforce the following</i></p> <p>“These sessions are crucial because they begin the process of making the present feel connected to the far future using a journey metaphor including and forks and their consequences and roadblocks and ways around them. In session 4, this occurs with writing the rough draft, and beginning to create timelines.</p> <p>“When you implement this session, make sure to:</p> <ul style="list-style-type: none"> • Get to the four domains of adulthood in the beginning of the session and make sure to add any domains not previously mentioned. • State the core instructions for the draft, which are write a list, number it, and write at least one fork and one roadblock and way around it. A fork is a choice point that leads to different outcomes. A roadblock is something you did not choose but stopped you and you have to come around it. If you want you can write this on newsprint so students can refer back to it. • Use what you know about students from their Session 1 strength or ability to have them think about ways to get around roadblocks • Help students recognize that roadblocks are normal – everyone comes across them – and thinking of plan to get around them helps us overcome setbacks. <p>“High level implementation looks like <i>(share the quality of delivery information description).</i>”</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: Provide feedback relevant to session 4 – which is focused on the rough draft and for session 5 that is focused on completing the timeline and share out.</i></p>
<p>Break (5 minutes)</p>	

Session 5: Timelines, Part 2 (25 minutes, teacher led)

First have teacher implement Sessions 4 and 5

After teacher completes lesson, reinforce the following

“These sessions are crucial because they begin the process of making the present feel connected to the far future using a journey metaphor including and forks and their consequences and roadblocks and ways around them.

“When you implement this session, make sure to:

- Verbalize what students are doing well to highlight and set a positive norm, as you walk around,
- Remind students that forks are choices; failure is often not a choice but an obstacle to get around.
- Repeat, clarify and deepen understanding of the idea of fork and roadblock. This matters so that students can keep using the ideas going forward.
- Keep the pace up, some level of extraneous activity is okay as students finish at different paces
- Let the students lead. Students may say things that you as a teacher disagree with – you may know they are not using a strategy they say they are. That is okay; let students represent themselves as they choose. Do not put them on the spot.
- Help students recognize that roadblocks are normal – everyone comes across them – and thinking of plan to get around them helps us overcome setbacks.

“High level implementation looks like *(share the quality of delivery information description).*”

Implementation
PowerPoint Slides

Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation

<p>Session 6: Possible Selves and Strategies (25 minutes, teacher led) <i>First have teacher implement Session 6</i></p> <p><i>After teacher completes lesson, reinforce the following</i> “This session is crucial because it describes both positive expected possible selves and negative to be avoided ones. In addition, this session helps students connect next year to the present through strategies for action, emphasizing two active ingredients of IBM.</p> <p>“Keep it mind, people have positive and negative possible selves. Research shows that both of these can be motivating—what matters is whether these identities are made relevant through connection to the present—and that having positive and negative possible identities in the same domain (i.e. high school graduate and high school dropout) is beneficial.</p> <p>“When you implement this session, make sure to:</p> <ul style="list-style-type: none"> • Ask students about concepts and the task to check for understanding • Use examples from the students to facilitate understanding. This provides an opportunity for other students to learn. It also makes student work and contributions feel meaningful and important. • Move around the room to direct attention and encourage class involvement. • Students may say things that you, as a teacher, disagree with: you may know they are not using a strategy even though they say they are. That is okay; let students represent themselves as they choose. Do not put them on the spot. • Help students recognize that the same strategy can help them move towards an expected and away from a to-be-avoided possible self. <p>“High level implementation looks like <i>(share the quality of delivery information description).</i>”</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation</i></p>
<p>Break (5 minutes)</p>	

<p>Session 7: Pathways to the Future (25 minutes, teacher led) <i>First have teacher implement Session 7</i></p> <p><i>After teacher completes lesson, reinforce the following</i> “This session is crucial because it demonstrates that strategies for attaining a next year possible self will also help one attain an adult possible self. This reinforces the connection between the far future and the present.</p> <p>“When you implement this session, make sure to:</p> <ul style="list-style-type: none"> • Even if a student response is not what you expected, reframe it so you can return to the main point • Practice <i>Pathways</i> across positive and negative next year possible selves to positive and negative adult possible selves. Sometimes the same strategy can do lots of work. • Help students connect timelines and poster boards through thinking that our timeline into the future, although not certain, helps get going. <p>“High level implementation looks like <i>(share the quality of delivery information description).</i>”</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation</i></p>
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Lunch (30 minutes)

<p>Lunch (30 min)</p>	<p><i>At this point, you will need to transition to the Teacher Training PowerPoint slides</i></p>
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Other Implementation Tips (10 minutes)

Take home point

- Reinforce implementation tips that have been mentioned along the way.

<p>Other Implementation Tips (1 minute) “Prior to finishing the remaining five sessions, let us review some other implementation tips that will help you along the way.</p>	<p>Teacher Training PowerPoint Slide 50</p>
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Pathway Pedagogy in Action Additional Thoughts (5 minutes)

“As you are thinking about implementation of Pathways, there are some additional thoughts to keep in mind

- *Build on and deepen your high-level pedagogy skills.* The Pathways program builds a path for students to be active learners and for you to use your high-level pedagogy skills by really deeply understanding the learning structure and core concepts.
- *Establish Rules.* Having set the rules in Session 1, make sure to return to that issue if something comes up, like saying things that are hurtful.
- *Be mindful of “Bandwagon effects”.* If your instructions are clear, students are less likely to worry whether their ideas are “correct” and so will less likely to copy one another – some teachers refer to this as “Bandwagoning”. **If the instructions are not clear, students will rely on what other students say to get the ‘right’ answer.** If rules are not clear, students will fear being negatively criticized by others and so will repeat what others have said. **If your implementation is unclear, students will not feel reinforced for thinking deeply.** Here are pointers for correcting once a bandwagon starts: As you are writing on the board and verbally reinforcing participation and did you tell students how you are handling repeat responses. For example, tell them you are adding checks or lines next to repeat responses. Also, you can say, “good, we heard lots of [that kind of an answer], what other [core topic]?”
- *Hang materials.* It is really important to post everyone’s work so that everyone is represented. You can take pictures and put them on the board and webpage. **Keep rules hung up during all session, and hang addition materials as you go, including both newsprint when you cluster as well as student work.** For example, introductions and timelines are good candidates. Having timelines up in the classroom or in the hallway allows students to look at what they and others have chosen near-future possible selves, adult possible selves, forks, and roadblocks.
- *Make sure materials are organized.* This means ensuring students turn in the materials so they are not lost. You may want to use personal folders so that you can show student work to parents at Parent-Teacher events. **Collect materials at the end of each session;** keep the materials organized by session and student so that students can pull out the materials as Pathways progresses.
- *Remember what you know.* As a teacher, the student activities give you insight into how each student sees him or herself, **use what you know about students constructively to motivate students in Pathways and outside of Pathways by linking back to what they have said.** This shows you care and pay attention and that the student matters to you. Mattering and having purpose are key motivating engines. Remember Pathways provides a new way for you to learn about your students and develop more meaningful relationships with students.
- *Use session activities outside of Pathways.* **If there are**

Teacher Training
PowerPoint Slide 51

<p>General Implementation Tips (3 minutes)</p> <p>“Some other general implementation tips include:</p> <ul style="list-style-type: none"> • Terms, rules, and expectations should be clear. • You have to buy in, be prepared, and be the expert for your students. The manual has it all there for you. • The culture differs in different classroom. Side conversations are likely relevant, and so some side conversations are needed. This is why it is critical to circulate for understanding – you will also be able to insure that any side conversations are relevant to <i>Pathways</i>. • We cannot reiterate enough. Watch the videos on the website to see how points get understood, progress continues, and how students stay focused. Your comfort level to implement the program will improve the more you are prepared to implement, as will student understanding of take home points. • Remember, the active ingredients continue to cycle through the program – all students won’t master all concepts the first time around • Use the time markers in your manual to guide whole group, small group, and individual group. Be the timekeeper. It’s fine even if you do not finish as long as there is time for take home points. Teachers who have implemented <i>Pathways</i> and not followed the suggested pace tend to not implement as effectively. 	<p>Teacher Training PowerPoint Slide 52</p> <p><i>At this point, you will need to transition to the Implementation PowerPoint slides</i></p>
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Teacher Implementation of Pathways Sessions 8-12 (2 hours 5 minutes + 5 minute break)

<p>Session 8: Action Paths (25 minutes, teacher led) <i>First have teacher implement Session 8</i></p> <p><i>After teacher completes lesson, reinforce the following</i> “This session is crucial because it gets students to focus on what they can be doing <i>now</i>—at a specific time and in a specific place—to help attain their adult possible selves.</p> <p>“When you implement this session, make sure to:</p> <ul style="list-style-type: none"> • Mix up the groupings if at all possible so that students are not habituated to a particular group of students. • Ensure students recognize that action paths are similar to the <i>Pathways</i> boards, except now adding when and where. By identifying concrete actions, we are more likely to act on our strategies. • Similar to the <i>Pathways</i> Boards, practice pathways across positive and negative next year possible selves to positive and negative adult possible selves. • Emphasize that we can better plan for stumbling blocks but linking possible selves through action paths, as it gives us concrete steps to get around roadblocks. <p>“High level implementation looks like <i>(share the quality of delivery information description).</i>”</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation</i></p>
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<p>Session 9: Puzzles (25 minutes, teacher led) <i>First have teacher implement Session 9</i></p> <p><i>After teacher completes lesson, reinforce the following</i> “This session is crucial because it demonstrates that something seemingly impossible is actually quite doable. This is the first step in inoculating students against the feeling that experiencing difficulty is a sign that a task is impossible. The goal is for all students to walk out of the session thinking, “difficulty is not impossibility.”</p> <p>“It is also important to point out that student experiences of difficulty are normative. As students struggle with the puzzles it is an opportunity to point out that everybody experiences difficulty, and that these experiences are common.</p> <p>“In addition, strategies are useful. Generally student will solve the puzzles using some kind of grid. Teachers should remind students that this is a strategy akin the kinds of strategies they generated in previous activities.</p> <p>“When you implement this session, make sure to:</p> <ul style="list-style-type: none"> • Repeat back and reflect solutions the problem was difficult but students had a number of strategies to solve because it was important. • Connect the idea that difficulty means it’s for me to other prior sessions, recognizing that overcoming obstacles through strategies helps us attain our possible selves or positive and negative forces are motivational forces providing us a model or anti-model on how to find a path around difficulties. • Remember that you do not have to get through both puzzles. The goal is not to finish both puzzles but for students to recognize that they can solve the puzzle if they take a step back, and recognize that difficulty does not mean impossible, but can be possible. <p>“High level implementation looks like <i>(share the quality of delivery information description).</i>”</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation</i></p>
<p>Break (5 minutes)</p>	

Session 10: Solving Everyday Problems (25 minutes, teacher led)

First have teacher implement Session 10

After teacher completes lesson, reinforce the following

“This session is crucial because it shows students that difficulty can be a sign something is important, and it brings the experience of difficulty into relevant real life situations. It allows you and your students to use all of your pathways skills.

“When you implement this session, make sure to:

- Note if students are immediately providing examples. If you have a routine of having students explain the concepts and give examples by session 10, they know how to engage and feel ownership, and will do it immediately.
- Use your manual to help you cluster and classify as students provide responses
- Have students rearrange themselves so that they can all see and crumple their papers so that their problems remain anonymous. The papers can be thrown on the floor or if this feels too much for you, just collect them. Throwing itself is cathartic so do it if you can.
- Similar to session 9, connect the questions/strategies students pose to previous pathways concepts.

“High level implementation looks like *(share the quality of delivery information description).*”

Implementation
PowerPoint Slides

Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation

Session 11: Paths to Graduating (25 minutes, teacher led)

First have teacher implement Session 11

After teacher completes lesson, reinforce the following

“This session is crucial because it takes difficulty out of the realm of relevant hypotheticals and places it directly into students’ lives. Session 11 focuses on the question of difficulty going forward—specifically, finishing high school and getting to college.

“When you implement this session, make sure to:

- Watch the video of Dr. Oyserman implement this session prior to implementing it. Many teachers go over time and find this session difficult to implement with so much information.
- The goal is not to read the various handouts, but ask targeted questions to students to help bring out what they know and fill in gaps of information that they do not know.
- When student response is not exactly what you are going for, build on it so that participation is always reinforced, but return to the core theme so that participation keeps the flow
- Remember to bring back to core concepts especially roadblocks and linking present to future
- Some students did not get into test-in high schools or are not on track to have 9th grade algebra. Your goal is not to scold students about why these failures happened but rather to help them see choices and ways around these roadblocks.

“High level implementation looks like *(share the quality of delivery information description).*”

Implementation
PowerPoint Slides

Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation

<p>Session 12: Wrap Up (25 minutes, teacher led) <i>First have teacher implement Session 12</i></p> <p><i>After teacher completes lesson, reinforce the following</i> “This session is crucial because it connects all the key points and reviews what was learned in each of the previous sessions. Thinking about each session at once emphasizes that what students do now is important for attaining their near possible selves next year, their possible selves for the next few years, and their adult possible selves.</p> <p>“When you implement this session, make sure to:</p> <ul style="list-style-type: none"> • As you write session titles, make sure to leave space if it is out of order. Do not stop the flow and fill in missing gaps as you go • When voting, you may want students to come to the board and vote. The point here is to get the students moving. There are many ways that the students could vote; getting the students to move is a value in itself. • Take every opportunity to help students to see connections across sessions. Use student language rather than your own language. This shows students that they matter and it increases their engagement. • Remember what students have said to link comments between groups. This way a student will know that each of their contributions connects to a central point and has a purpose. • For students who speak softly, it is important to give them space to speak. That means for example standing next to the student so that others can see that it is that student’s turn to talk. <p>“High level implementation looks like <i>(share the quality of delivery information description).</i>”</p>	<p>Implementation PowerPoint Slides</p> <p><i>Facilitation note: In addition to the reinforcement points, use the fidelity checklist to identify each points to reinforce based on their implementation</i></p>
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Using Pathways Outside of Sessions (5 minutes)

Take home point

- Identify ways to collaborate with colleagues during implementation of *Pathways*.
- Identify ways in which they can continue to use *Pathways* concepts outside of the program.

<p>Using Pathways Outside of Sessions (1 minute) <i>“Pathways was developed to help students understand the connection between school and their future selves – it is not a fix all. However, there are a number of opportunities to strengthen the implementation and effectiveness of Pathways outside of the 12 sessions.”</i></p>	<p>Teacher Training PowerPoint Slide 53</p>
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<p>Using Pathways Outside of Sessions (9 minutes) “These include...”</p> <ul style="list-style-type: none"> • <i>Collaboration.</i> Teachers should make time to join a weekly call with their team of teachers or coach about how the Pathways sessions are going. In addition, teachers should try to talk to other teachers leading Pathways, whether they’re from their own school or a different school. These conversations can be simple self-reflections or more targeted discussions about the specifics of leading the sessions. The goal is not only to benefit from debriefing and hearing yourself talk about what you’re doing, but also to learn about other ways that teachers might be implementing the sessions. If there is a group of teachers in a school implementing Pathways, it is important that they find ways to create a safe space where they can talk about their practice and concerns. • <i>Positive Reinforcement After Pathways.</i> Pathways elements don’t have to stop after the 12 sessions. The core elements of IBM can guide classroom instruction and establish a mindset for how teachers can navigate their professions. For example, the notion that a feeling of difficulty may signal importance is relevant in most classroom settings. Teachers can continue to prime and reinforce beneficial interpretations of difficulty throughout the year. • <i>Making Pathways Stick at Your School.</i> At a certain point you may want or need to convince others to fund or support the implementation of Pathways to Success in your school. <i>Pathways</i>, a Tier I program, is universal academic support. Depending on where school administrators see value, it may be helpful to pitch Pathways as an SEL (social and emotional learning) program. Alternatively, because teachers tend to incorporate <i>Pathways</i> concepts into their instruction long after the program is over, it may be possible to also pitch the professional development aspects of Pathways. 	<p>Teacher Training PowerPoint Slide 54</p>
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Wrap and Adjourn (1 minute)

<p>Wrap-up and Adjourn (3 minutes)</p>	<p>Teacher Training PowerPoint Slide 55</p>
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WEEKLY CALL-IN INFORMATION

Along with the three-day in-person training, the teacher trainers and teachers should participate in a weekly check-in call. The weekly check-in will be taken in three parts – (1) reminder email, (2) reflection on sessions already implemented, and (3) preparation for the next two sessions. To help with the preparation questions, you will need *Handout 2: Preparation Tips by Session*.

Reminder email

Send a reminder email a couple days before each check-in to remind them what sessions that they will review and which sessions they will prepare for, along with the reflection and facilitation questions below.

An example email might read, “I am sending a quick reminder for our *Pathways* weekly check-in. Have your manual for the call in, as we will review it. For each call you will be asked each of these questions below. Please prepare. The goal is that each person speak each session and you will be asked about each of these points. This past week you implemented sessions X and X, so we will review those sessions. In addition, we will begin to prepare for sessions X and X that you will implement next.

Reflection on sessions already implemented

We will using the following questions to reflect on the sessions we already implemented:

- (1) Sharing of artifacts from the session
- (2) Give examples of insights from your students

- (3) What did you do well?
- (4) What did you do poorly?

- (5) Was it fluent?
- (6) Did you hit the take home?
- (7) Did it feel good, what was the climate?

Preparation for the next session

We will using the following questions to help us prepare for the next sessions. Prior to answering the questions, take a few minutes to review the appropriate sessions in *Handout 2: Preparation Tips by Session*, as well as the *Implementation Manual*

- (1) What is the key take home point?
- (2) What is the flow of action?
- (3) How do learners receive the key take home point? What are the key activities that deliver it?
- (4) How does the session relate to other sessions?
- (5) What are some key points to remember as you prepare to implement this lesson?

Appendix A: Sample Agenda