Literature Review: Goal Setting

This is a limited review of publications highlighting research on effective goal setting strategies and the impact of goal setting on learner persistence. It does not represent an exhaustive review of current research. Its intended use is to spark thought and discussion around goal setting in our adult education programs.

1. **Brock, A., & Hundley, H. (2016). *The Growth Mindset Coach: A Teacher's Month-by-Month Handbook for Empowering Students to Achieve*. Ulysses Press.**

   The authors outline how the types of goals that students set can lead to different outcomes. Performance goals identify skills, tasks, or outcomes that students want to acquire or achieve. Learning goals focus on how a learned skill applies to subsequent challenges, both in and out of the classroom. An example of a performance goals might be a GED student working on writing skills in an effort to get points on the RLA extended response, or an ESL student working to improve their English skills to be successful in their naturalization interview. Associated learning goals would be for the GED student to be able to successfully write reports and emails in their workplace, and for the ESL student to be able to speak English in everyday situations. People set both kinds of goals for themselves, but learning goals consistently lead to mastery. In one study, students who set learning goals did much better on tasks where they were asked to apply learning in new ways or at a more difficult level than students who set performance goals.

   Classroom goal structures have also been found to influence whether students are more performance-oriented or learning-oriented. One example is the TARGET system, which identifies six aspects of classroom environment which can lead to either performance-oriented or learning-oriented outcomes. (See Appendix A) A meta-analysis of over 100 studies on student motivation showed that students who focused on performance over learning did "less well academically, thought less critically, and had a harder time overcoming failure." (Brock & Hundley, 2016, 140) Students develop grit and dedication to learning through learning goals rather than performance goals.

   Addressing the idea of productive failure–the concept that mistakes and setbacks lead to learning–can also be incorporated into goal setting activities. Introducing activities that force students to struggle with challenging tasks builds a deeper understanding of problem solving. That concept can then be tied

to goal setting, and the idea that if you don't achieve a goal you haven't failed, but you've learned valuable lessons that can help you to achieve your goals in the future.

Incorporating growth-mindset based activities can encourage students to recognize negative self-talk and channel it into more positive thinking around goals. This kind of growth-mindset approach can be explicitly taught and scaffolded using a template for growth-mindset problem solving. (See Appendix B)

2. **Brock, A., & Hundley, H. (2017).** ***The Growth Mindset Playbook: A Teacher's Guide to Promoting Student Success.*** **Ulysses Press.**

According to the authors, normalizing struggle and failure as part of learning reinforces the idea that learning is a process and not a product. Making struggle and failure an explicit part of teaching by sharing stories of people who have persevered through failures before achieving great success is an evidence-based approach. The authors cite a study in which one group of high school science students read about the accomplishments of three renowned scientists, a second group read about their personal struggles, and a third group read about their intellectual struggles. The stories that detailed their personal and professional struggles also included how they worked to overcome those obstacles. After a six-week intervention the grades of the students increased, with a "notable increase for low-achieving students." (Brock & Hundley, 2017, 73) The grades of the students who only read of the scientists' accomplishments went down.

The authors cite developing plans for dealing with challenges as an important skill in developing persistence and normalizing struggle. As part of the goal-setting process, ask students to develop an If/Then plan for overcoming obstacles. Students think of barriers that have impacted their ability to meet their goals in the past, or imagine barriers that might impact them in the future. Then they come up with potential solutions to those barriers: If this happens, then I will…. The act of planning ahead for possible obstacles to their progress makes students more likely to persist even if unforeseen challenges that they did not plan for arise.

3. **Bruch, J., Borradaile, K., Raketic, M., & Lucchesi, G. (2023).** ***Career navigators in adult education: What experts say about their role and how to support their success.*** **Princeton, NJ: Mathematica. [Career Navigators in Adult Education (mathematica.org)](mathematica.org)**

The strategy of employing career navigators and the skills and knowledge those employed as career navigators need for success is the focus of this study. The authors cite recent research that indicates the importance of the role of career navigators in helping students to achieve their academic and career goals. They list five key activities of career navigators:

1. Career planning, exploration, and counseling;
2. Educational planning;
3. Support to learners in navigating systems within and outside the adult education organization;
4. Learner skill building; and
5. Job search readiness and job development and placement. (Bruch et al., 2023)

In addition, they provide examples of activities that a career navigator might use for those with varying degrees of education and work experience.

According to the study, the knowledge and skills career navigators need are encompassed in four competencies:

1. Knowledge of the adult learner population and skills for working with adult learners
   a. An understanding of the myriad challenges facing adult learners along with their goals, strengths, and needs is vital, as they may never have received guidance in formal education.
   b. Career navigators must have strong interpersonal skills to build relationships with students.
2. Knowledge of career pathways and skills to help learners make informed decisions
   a. Adult learners need help understanding how their interests and abilities translate into high-wage career paths.
   b. Career navigators need knowledge of industries, postsecondary programs, and credentialing to help learners set career-pathway-related goals.
3. Knowledge of resources available to learners and skills to build and maintain strong partnerships
   a. Adult learners may need help building critical thinking and executive function skills.
   b. Career navigators need an understanding of the skills that lead to success so that they can explicitly teach them.
4. Knowledge of learner skills that can lead to success and skills to support learners' skill building.

a. Adult learners are often unaware of supports and resources that can assist them in reaching their goals.
   b. Career navigators can act as guides to the disconnected resources for wide-ranging needs of adult students and can help to build connections with relevant resources. (Bruch et al., 2023)

Finally, the authors provide a framework of skills and abilities to consider when hiring and/or training career navigators

4. **Comings, J. (2007). Persistence: Helping adult education students reach their goals.** *Review of Adult Learning and Literacy, 7*(2), 23–46. https://www.researchgate.net/publication/241474711_Persistence_Helping_Adult_Education_Students_Reach_Their_Goals

Comings sets the stage for this paper by stating that most adult education students will take hundreds to thousands of hours to achieve their goals. Comings then draws a distinction between *persistence* and *retention*, using *persistence* as the preferred term, since it includes the idea that adults can persist in their learning even when they are not actively attending an adult education program. He defines persistence for the purpose of the study "As adults staying in programs for as long as they can, engaging in self-directed study or distance education when they must stop attending program services, and returning to program services as soon as the demands of their lives allow." (Comings, 2021)

Research links persistence to learning, finding 100 hours of instruction as a point at which adult students are likely to show measurable progress; however, only four states reported a mean persistence rate of over 100 hours according to the US Department of Education in 2003. The study presents evidence on changes that could support increased persistence in adult students. The literature review found:
   ● Because student motivation drives students to overcome barriers to participation, programs should structure recruitment and orientation to reflect student motivations.
   ● The limited resources of adult education programs are used for those students who are motivated to enter classes.
   ● The definition of participation in adult education should be changed to reflect the work that adult students do when they have stopped out of formal programs.
   ● Programs should develop instructional plans that strongly incorporate student goals and that adapt to changing goals as students persist.

- Categories of factors that contribute to students stopping out include "*situational* (influences of the adult's life circumstances), *institutional* (influences of systems), and *dispositional* (influences of experience)." (Comings, 2021)
- Because the first three weeks of participation are critical to student persistence, intake and orientation should begin with goal setting and planning for success.

In 1996 the National Center for the Study of Adult Learning and Literacy (NCSALL) began a multi-phase study on persistence. The first phase of the study included interviews of 150 adult students and their persistence in GED classes. It employed a force-field analysis, which "places an individual in a field of forces that support or inhibit action along a particular path." (Comings, 2021) By studying the forces and their effect on motivation one can determine how to help students reach their goals.

Some findings include:
- Typical classifications of students (gender, ethnicity, employment status, etc.) do not have a strong influence on persistence. Instead, immigrants, students over age 30, and parents of teenage or grown children are more likely to persist.
- School experience is not associated with persistence. Though many participants did have negative school experiences, their participation in adult education programs indicate that they have put negative experiences behind them.
- Previous learning experiences outside of school are related to persistence.
- Students who persisted and students who stopped out discussed forces affecting persistence in the same ways.
  - Positive forces include relationships, goals, teacher and fellow students, and self-determination.
  - Negative forces include life demands, relationships, and poor self-determination.

Participants' descriptions of positive forces overcoming negative forces led researchers to conclude that building positive supports could be more critical to increasing persistence than removing barriers or negative forces. The study team identified four key supports to persistence:
1. Establish the student's goal.
2. Increase a sense of self-efficacy.
3. Help students manage the positive and negative forces that help and hinder persistence.

4. Ensure progress toward reaching a goal.

The second phase of the study identified five persistence pathways and supports for each:

1. ***Long-term students*** see education as an end in itself rather than identifying specific goals. They persist if a program meets their needs, is convenient, and is enjoyable. Providing quality formal instruction with multiple ways to learn could help these students to increase the intensity of instruction and reach their goals more quickly.
2. ***Mandatory students*** will not persist longer unless they can see past the outside requirements for attendance to find connections between learning and and their personal goals.
3. ***Short-term students*** participate intensively to meet a specific goal. While they may leave a program after a few weeks, they may still persist through self-study or participation in another program. Programs need to identify and be mindful of their specific goals upon entry into the program in order to focus their instruction appropriately.
4. ***Try-out students*** have severe barriers to participation and do not have well-defined goals that support persistence. They are motivated to learn, but they are not yet able to make a commitment to learning and will end their participation quickly. While adult education staff strive to be welcoming and encouraging, they need to realize that enrolling students who do not have the capacity to succeed does not work to the student's benefit. Instead, programs can design their intake and orientation to help students identify the barriers to participation and to help them to create a plan that will lead to successful enrollment in the future.
5. ***Intermittent students*** are the most common type of student in most programs. When they are not active in their programs they may stay in contact with teachers. They may also move between programs. Program staff do not always know if a student is intermittent or if they have stopped out. Programs can help them to achieve their goals faster by helping them to link their program-based study and self-study into a continuum of learning using multiple learning resources. These programs can redefine program participation to include connection to the program rather than traditional attendance hours. (Comings, 2021)

Implications for practice emphasize the importance of developing detailed written learning plans that include student goals, the knowledge and skills needed to achieve those goals, multiple modes of quality instruction including avenues for study outside of the traditional classroom, and supports needed for

students to persist, including explicit plans for how to re-engage and re-enter programs if they stop out.

Implications for policy include the identification of persistence supports and resources as essential to program design. The lack of resources and funding could mean limiting enrollment to increase per-student funding until additional funding becomes available. Policymakers could provide additional resources available if persistence rates would be identified as a measure of program quality and accountability criteria could be developed.

5. **Comings, J., Parrella, A., & Soricone, L. (1999). *Persistence among adult basic education students in pre-GED classes* (NCSALL Report #12). Harvard Graduate School of Education.**

   This is the full Phase One study described in article #4. It includes the full literature review and a comprehensive description of the methodology used in the first phase of the NCSALL persistence study.

6. **Conrad, C. F., Gasman, M., Lundberg, T., Nguyen, T.-H., & Commodore, F. (2013). *Using educational data to increase learning, retention, and degree attainment at minority serving institutions.* University of Pennsylvania Graduate School of Education.**
   https://repository.upenn.edu/cgi/viewcontent.cgi?article=1394&context=gse_pubs

   Twelve Minority Serving Institutions (MSIs) took part in a three-year study to identify practices that had an impact on retention, learning, and degree attainment. The participating institutions included three Historically Black Colleges and Universities, three Hispanic-Serving Institutions, three Tribal Colleges and Universities, and three Asian American, Native American, and Pacific Islander Serving Institutions. The focus on data-driven decision making has allowed institutions to gather information on the programs and practices that affect student goal achievement. Expanding the use of data beyond traditional measures of student success can help MSIs to tailor their programs to the unique needs of their students based on their culture, educational experiences, and social well-being in addition to their academic skills. In addition, these institutions serve a statistically significant number of students who are underprepared for postsecondary academics who need additional supports to succeed.

   Lessons learned from the study include three principles for the use of data:

- Use commonly accepted measures of students' progress to identify opportunities to improve student success. This encompasses data gathered for accountability reporting.
- Empower staff and faculty to gather data about students' challenges and successes in order to improve educational opportunities. Programs also have teams that use this data to design and pilot programs that can address the challenges students face.
- Use the data to explain MSI students' paths to success to students and other stakeholders. This involves contextualizing the data to help students and stakeholders understand the factors that lead to retention, completion, and learning and the impact that education has on their communities.

MSIs identified six areas in which they gather and use data that help them to innovate in an effort to make their programs more relevant, effective, and efficient.
- **Students' Prior Educational Experience:** The usual method of using placement test scores to identify students who would be successful in STEM programs was not working for a Tribal college that wanted to increase the number of Native Americans in STEM careers. A combination of interviews with high school instructors to identify students with STEM interests who had not yet considered postsecondary education and expanding the range of test scores to identify those who were just below the recommended levels increased the number of students who moved into two- and four-year STEM programs.
- **Students' Aspirations and Goals:** A summer bridge program uses the academic goals and needs of at-risk students to plan a customized first-year experience that involves staff and students working together to select classes, academic support services, and co-curricular activities for their first year. Students who participate are more likely to persist to their second year.
- **"Chokepoints" in the Curriculum:** When a community college realized that working adults, including those who were low-income and people of color, were not completing the degrees and certifications they needed to advance at work, they attempted a new way to identify barriers. They created a team of instructors, researchers, tutors, and mentors to review qualitative and quantitative measures of student progress. Case management practices including adjusting instructional pace, added supports, and weekly meetings between students and mentors have increased quarter-to-quarter retention.

- **Points of Contact with Faculty and Staff:** One college is using information about student and staff interactions to facilitate student engagement. Staff members use multiple opportunities and channels for communication including social media and personal invitations to increase student involvement. All contacts and interactions are documented, including student reflections on events. Information gathered not only shows which students are engaging, but also what kinds of interactions matter to students and how those patterns of engagement translate to persistence.
- **Students' Learning:** A Tribal college recognized that college algebra was a significant barrier for many students. The faculty realized they needed to know more about placement scores and how they related to what students were learning and where they were getting bogged down. By looking at the curriculum at a more granular level they were able to re-tool the developmental math classes, incorporating additional data from course software, student journals, and student projects, to show when students have mastered concepts and can apply them.
- **Students' Agency Beyond College:** One university found that Asian American and Pacific Islander students reached their second year successfully, but did not complete to graduation as successfully. They assessed the development of leadership skills in these student groups and tapped into their understanding of why they were getting college degrees. Incorporating service learning and students' sense of ethnic identity has helped staff to advise and support these students to persist. (Conrad, 2021)

7. **Jensen, E. (2019).** *Poor Students, Rich Teaching: Seven High-impact Mindsets for Students from Poverty*. **Solution Tree Press.**

Jensen combines research on growth mindset, drive mindset, and grit with evidence-based strategies for teaching students from poverty. This book is organized into seven high-impact mindsets that can inform teachers and help them to positively impact students affected by poverty. The section "Why the Achievement Mindset?" is focused on the belief that "student effort, motivation, and attitudes to succeed…are all teachable skills." (Jensen, 2019, 37) Jensen presents three strategies to boost motivation and achievement:
1. **Set gutsy goals.**
   a. The Research: Students' self-reported expectations of their success or failure is the single biggest contributing factor to student achievement, with an effect size of 1.44. Students who have

struggled academically expect to continue to struggle. Student motivation is a choice which is based in large part on four factors:
   i. Students' prediction of whether success is possible and expectancy of personal success based on their past
   ii. Their perceptions about their teacher's capacity to help them succeed
   iii. Students' self-assessment
   iv. Their overall self-concept (Jensen, 2019, 43-44)
b. Creating Gutsy Goals
   i. Big, over-the-top, moon-shot kinds of goals. The idea is that even if you fall short, you will still exceed the minimum.
   ii. Mastery learning is an example of a gutsy goal. Mastery goals have an effect size of .96 for disadvantaged and lower ability students. (Jensen, 2019, 44)
   iii. You, as a teacher, should be setting gutsy goals for your class.
   iv. You should explicitly teach your students how to set gutsy goals for themselves.
c. Giving A Reason to Believe
   i. In order to believe in gutsy goals, students have to believe in you as a teacher and in themselves.
   ii. Help students to identify the tangible opposition they face and to find the tangible reward for reaching their goal.
   iii. Reinforce the importance of their goals on a regular basis by referring to them and reviewing them.
   iv. Let students see your buy-in to the achievement of their goals by telling them that you care about their goals, you are good at your job, and you will work hard and learn from your mistakes.
   v. Teach students that failure is part of learning and can be positive if we accept them and learn from them.
d. Using Micro Goals
   i. Set smaller goals that can be accomplished in a week or two to track progress on the gutsy goal.
   ii. Micro goals increase motivation because they make progress evident.
   iii. They can also help to course-correct if you get off track.
   iv. Micro goals have an effect size of 1.21 when set by students. (Jensen, 2019, 48)
2. **Give fabulous feedback.**

a. The Research: Providing feedback, specifically intervention feedback, has an effect size of more than one year of learning. High-quality feedback includes specific changes students can make and includes a positive-to-negative feedback ratio of 3:1. The four feedback strategies Jensen focuses on are proven to have the greatest impact on the weakest learners.

b. SEA for Qualitative Feedback
   i. Strategy, Effort, and Attitude are traits that students can control, so feedback specific to those traits can be especially effective.
   ii. Targeted SEA feedback has been shown to be more effective than both feedback related to testing and simply telling a student "good job."
   iii. Teaching students how to provide SEA feedback has an even higher impact since this specific feedback can then come from multiple sources in the classroom.

c. 3M for Quantitative Feedback
   i. Explicitly teaching students the 3M (milestone, mission, and method) feedback process helps them to self-assess progress toward a goal and increases autonomy.
   ii. Teach students the critical pieces of 3M feedback:
      1. Milestone: Where am I?
      2. Mission: What's my goal?
      3. Method: How do I get there?
   iii. Students typically need the most support with Method. Explicitly teaching study strategies such as those listed on the "How I Can Get Better at Learning" resource (see Appendix C) can help students to develop habits that lead to persistence and success.

d. MIC Feedback
   i. Micro-Index Card (MIC) Feedback makes students' thinking apparent and assists in identifying tasks that intimidate students and keep them from attacking larger goals.
   ii. Every other day at the beginning of a class session, ask students to write their name on one side of an index card and to answer one of the following questions on the other side:
      1. Two things about themselves that you (the teacher) should know but most don't know.
      2. Past experience in the subject area (in five sentences or less).

        3. How the week has been (what they liked and what they'd change).

        4. Goals for the class.

        5. About parts of a paper (introduction, theme, thesis, evidence and support, argument rebuttals, summary, and conclusions).

        6. Three friends in the classroom (to learn how much social glue each student has).

        7. A five- to ten-word outline of what they're currently working on.

        8. Advice for another, younger, student about how to approach most mathematics problems.

    iii. Those teaching online could use a short electronic form to collect information.

    iv. Results help you tailor differentiation to each student and to build rapport.

  e. Student Feedback - The best feedback is student feedback to the teacher. Jensen lists four student feedback strategies:

    i. Nonverbal information: As you observe students, look for physical signs of confusion, distress, buy-in, disengagement, etc.

    ii. Yesterday's learning: Give students a set amount of time to write down everything they remember from the previous day's lesson. Use results to re-teach concepts that didn't stick or to target supports to specific students.

    iii. One-minute summary: At the end of class ask students to respond to two questions: What is the most important thing from class today? And What is still a bit confusing to you about today's class?

    iv. Suggestions box: As an exit pass, have students provide short, specific feedback about the previous lesson and drop in in the suggestions box. (Jensen, 2019, 49-55)

3. Persist with grit.

  a. The Research: Jensen defines grit as "the tenacity and strength to pursue your long-term goals, …even in the face of obstacles." (Jensen, 2019, 57) Grit can be confused with self-control, which is the short-term effort and attention to reaching a goal. Grit is a greater predictor of success than IQ.

  b. Five Ways to Develop Grit

      i.   Help students continually value their gutsy goal. Reference the long-term goals students have identified and link them to lessons.

      ii.   Show students what grit looks like. Share stories of grit from personal experiences or examples from public figures, sports, or movies. As students to share when they have shown grit in their lives.

      iii.   Foster conditions for grit. Build positivity into your regular classroom practice. Celebrating progress and modeling optimism reinforces effort and grit.

      iv.   Make grit real in many ways. Use multiple examples such as quotes to refer to grit to make sure students know what it is. One teacher drops an egg and a super ball to illustrate the ability to bounce back.

      v.   Reinforce grit in action. Call out students who persist when faced with challenges.

c. Tools for When Grit Drops

      i.   Linking student values to goals and tasks can help to reignite grit when it wanes.

      ii.   Ask students to spend three minutes writing about their personal traits. Focusing on their identity can reinforce the need to persist and reinforce the importance of grit.

      iii.   Label your students as experts-in-training or scholars. These people don't give up when they make mistakes. They persist and continue to learn.

      iv.   Teach students a three-step strategy to reactivate grit:

           1. Listen to your self-talk as you start a task. Make sure you are talking to yourself in a growth mindset voice.

           2. Reactivate your dedication to your goal by visualizing the moment you achieve it. Share your goal with someone who is important to you.

           3. Choose again. Rededicate yourself to succeeding at your goal and the effort you have to put in to achieve your goal. (Jensen, 2019, 57-60)

8. **Kerka, S. (2005).** *Learner persistence in adult basic education.* **California Adult Literacy Project. https://www.calproonline.org/pubs/100719LearnerPersistenceNewsletterPress.pdf**

The author combines the definition of persistence put forth by Comings (see #4 above) and early results from NCSALL's Longitudinal Study of Adult Learning to examine participation in adult education from the learner's viewpoint with the end goal of creating a programmatic system that supports persistence. While past studies have applied force-field analysis in activities with students as a form of self-reflection and barrier assessment, Kerka asserts that there are positive and negative forces at play at the institutional level that can affect students' ability to persist. She identifies four primary areas where force-field analysis could be applied to impact the student experience:

- **Intake**
  - Negative forces in the first three weeks of student experience are especially detrimental to persistence.
  - While intake sets the tone for the student experience, most programs' intake procedures are not designed to collect information that can be used to influence the programs and/or their classes.
  - Intake should be "an ongoing, dynamic process that revisits learners' goals, barriers, and other issues that may change over time." (Kerka, 2023)
  - Social support of family, friends, fellow learners, and teachers leads to greater persistence. Students cited the cohort of peers as an especially important source of support through their learning experiences.
- **Goal Setting**
  - Adults who have a specific goal are more likely to persist than those who do not.
  - Goals should be revisited on a regular basis to determine if they are still valid or need to be changed.
  - Making the review and revision of goals part of regular instruction has led to higher persistence.
- **Follow-up and Redirection**
  - Reviewing goals on a regular basis can lead to redirecting the student.
  - Redirecting can mean: "(1) postponing the goal until serious situational barriers are under control; (2) shifting to a different goal path; (3) adjusting the goal up or down; or (4) taking a different route to the goal, which might mean switching to a program that better meets a learner's needs or withdrawing." (Kerka, 2023)
  - If students decide to withdraw from the program they should have a plan for future study.

9. **Meder, P. (2000). The effect of continuous goal setting on persistence in math classrooms.** *Focus on Basics, 4*(A), 7–10.

Meader used the findings of Comings (see #4 above) to study the effect of continuous goal-setting on persistence in her math classroom. Even though her program in Portland, ME provided transportation for students on the bus route, was located at a city bus stop, and offered on-site child care for eligible students, and placed students in math classes according to skill levels, they still struggled with learner retention. Meader hoped utilizing a research-based goal-setting approach would help more learners to persist.

All learners in her math classes completed a goal-setting questionnaire which prompted them to examine barriers and positive forces that could impact their goals. Because most of her students who didn't persist left class within the first six classes, Meader asked learners to review their goals during the fourth class session. She engaged the group in a discussion about the positive forces that were helping them and identified unanticipated barriers that had occurred. They also reflected on the action steps they might be neglecting in an effort to re-focus on actions that would help them to accomplish their goals. Four weeks later, the class repeated this reflective process with their goals. Meader asked them if they felt they would be able to persist for the remaining 11 classes in the session. At the end of the class session, students completed another questionnaire on which they rated the factors that helped them to persist.

Meader found that the primary barrier to persistence in her math classes was math anxiety and fear of failure. Students cited study strategies as one of the most impactful positive forces. In the class that utilized the continuing goal-setting activities, the retention rate was 71% compared to 45% retention in the control group where the goal-setting did not occur. Learners in the goal-setting classes who did not persist for the entire class session did persist longer in the class. After 18 classes, 80% of students remained in the goal-setting class while 73% remained in the control class.

Meader concluded that effective goal-setting has to be continuous, and therefore needs to be included as a part of regular lesson planning. In addition, learning that students identified math anxiety as their greatest negative force prompted her to incorporate more activities designed to address student fears and frustrations related to math.

10. **National Research Council. (2012).** *Improving adult literacy instruction: Supporting learning and motivation.* **National Academies Press.** https://doi.org/10.17226/13469

This distillation of the National Research Council's *Improving Adult Literacy Instruction: Options for Practice and Research* examines factors that impact adult learning and achievement. One such factor is "Motivating Adult Learners to Persist." Studies show that multiple factors are included in personal motivation.

- **Building Learners' Self-Efficacy:** Those who are confident and expect to succeed are more likely to persist. They are also typically more engaged.
- **Setting Appropriate Goals:** Realistic goals can build confidence.
  - Goals that are broken into short-term steps increase persistence and motivation.
  - Mastery goals compare the past self to the present self and lead to positive outcomes.
  - Performance goals compare the self to others or attempt to avoid appearing "dumb" and lead to mixed or negative outcomes.
  - Learners with a growth mindset are more likely to set mastery goals.
  - Teacher talk and feedback reinforces the type of goal setting in which students engage.
- **Offering Feedback in Ways that Motivate:** Feedback focused on strategy use and effort reinforces growth mindset and mastery goals. Learners need honest, specific, and clear feedback to develop accurate perceptions of their strengths and needs.
  - Assist learners in managing errors: Be clear that errors are expected because they are part of the learning process. Give feedback on strategies that can be used to correct errors.
  - Reframe explanations in ways that motivate persistence: Point out when struggles are due to external factors, such as illness, and when successes are due to internal factors, such as practice or belief in self.
  - Model literacy strategies: Model positive learning behaviors and strategy use.
- **Using Assessments Appropriately:** Present feedback on assessments in terms of personal growth rather than focus on a target score.
- **Incentives and Motivation:** If incentives are given, they should be tied to effort and mastery rather than simply completing a list of tasks.
  - In many adult ed programs, incentives take the form of support to minimize barriers.

- **Providing Choice and Autonomy:** Control over learning–or *perceived* control over learning–leads to persistence.
  - Increasing the options for activities increases motivation. However, you have to guard against overwhelming learners who may not be ready for a higher level of autonomy.
  - Providing more learner choices does not equal leaving learners to work on their own without guidance.
  - Even small choices are motivating.
  - Telling learners the reason for an activity or assignment increases motivation.
- **Values:** The more a person values a learning activity or skill, the more likely they are to persist.
- **Using and Inspiring Learners' Interests:** Learning about learners' personal and situational interests and connecting lessons to those interests increases motivation.
- **Encouraging Collaboration and Cooperation:** Collaboration with classmates creates a sense of belonging and community support.
  - Learners need specific and clear direction about expectations when working collaboratively.
- **Overcoming Systemic Barriers to Persistence:** The cognitive load of adult students has to be considered when assessing barriers to persistence.
  - A "lack of persistence in adult literacy instruction, while appearing to be a poor choice, actually may be a self-regulated, adaptive response to the constraints of competing demands and the need for trade-offs in life." (Board on Global Science and Technology et al., 2012, 23)

APPENDIX A

DIMENSION	DESCRIPTION	PERFORMANCE-ORIENTED CLASSROOMS	LEARNING-ORIENTED CLASSROOMS
TASK	Includes the type of learning tasks the students are assigned, and the rigor, engagement, and value inherent in the tasks.	Tasks are often considered too easy by the students and often include performance tasks (e.g., rote memorization and demonstration of math facts). Very little personalization of tasks; often not engaging to students.	Students work on challenging tasks that offer equity and variety in process and product, and are of high interest to the students. The students find meaning and value in the tasks assigned.
AUTHORITY	Includes the role of students as decision makers and directors of learning, and their role in classroom leadership tasks.	The teacher provides clear directives on tasks; there's little room for student input on tasks. Teacher is the leader of the class.	Learning is often student led; students are empowered to make decisions about learning tasks. Students are empowered to take on leadership in learning.
RECOGNITION	Includes how and why students receive recognition.	Students are incentivized and recognized for turning in flawless work, following rules, and finishing work efficiently. Taking risks and developing creative strategies are not encouraged.	Students are incentivized and recognized for demonstrating effort, improving skills, and accomplishing learning goals. Taking risks and developing creative strategies are encouraged.
GROUPING	Includes how students are grouped together in collaborative learning.	Homogeneous grouping strategies are used, including ability grouping; groups feature superficial collaborative efforts and underlying competitiveness between group members and among groups.	Heterogeneous grouping strategies that feature different learning styles, strategies, levels, and philosophies are used. Students are encouraged to engage in deep collaboration.
EVALUATION	Includes how the teacher assesses student work process and product and evaluation procedures in place.	No equity in assessment and evaluation; evaluation often done publicly with a focus on how students perform in relationship to one another.	Evaluation of students is varied, and done in a private fashion. Individual progress is often assessed with a focus on individual improvement and progress toward mastery.
TIME	Includes how a teacher plans class time and how time is used to complete tasks.	Time limits are strictly enforced, with little deviation from the original plan. Students are not given variation in time limits to complete tasks because of differences in learning place and pace. Quickness and efficiency is valued over mastery.	Students are encouraged to work at their own pace; schedule can be easily adapted to address gaps or allow for enrichment or remediation. Mastery is valued over quickness.

(Brock & Hundley, 2016, 139)

APPENDIX B

My Growth-Mindset Plan for Facing a Problem

My problem is:

I'll resolve my problem by this date:

The resources I need to solve my problem are:

I'll solve my problem by:

Barriers to solving my problem are:

I'll overcome barriers by:

If my plan doesn't work, I'll:

My fixed mindset might say:

My growth mindset will respond:

Here are some ways I'll know I've solved my problem:

(Brock & Hundley, 2016, 182-183)

Poster of Student-Learning Tools

HOW I CAN GET BETTER AT
LEARNING

Ask more questions in class.

Work closer with a study buddy.

Review work, and talk it over.

Create a mind map or graphic organizer of the content.

Summarize the learning daily.

Ask the teacher for specific help.

Preview learning before class.

Look up difficult concepts.