Grantees can use the Learn, Innovate, Improve (LI²) framework to help identify challenges that threaten the success of their programs, and to develop and iteratively test strategies to help improve program operations and potentially outcomes for SWFI families. This tip sheet provides guidance on three team-based activities that grantees can use to problem solve within their organization. SWFI grantees can contact their TA coaches for assistance with these activities. Grantees should confirm with their FPO that any identified activities are allowable under the grant.

The activities in this tip sheet focus on the first two phases: Learn and Innovate. Grantees will build on the strategies identified in the first two phases when they move on to the Improve phase. During the Improve phase, grantees can test and refine strategies on a small scale prior to full implementation to make more informed, evidence-informed decisions.

The LI² framework and the activities that follow draw on the principles of human-centered design by explicitly recognizing the human experiences involved at every step and systematically approaching problem solving, implementation, and testing of solutions in a participatory way. These activities work best when grantees set aside sufficient time for participants to deeply explore challenges and solutions, and when all participants feel comfortable sharing their honest perspectives. It’s also important to have the right mix of people in the room for these activities, including authority figures and decision-makers, seasoned staff, and direct service providers.
Learn phase activity: Problem Tree Analysis and Visualize the Vote

By using human centered design activities as part of the Learn phase, grantees can (1) identify their reason for considering program changes, such as challenges reaching performance goals, and (2) assess their readiness for change. Grantees can use a problem tree analysis to clarify and more deeply understand why change is needed for their grant to succeed. A grant team may know that change is needed to improve program operations or outcomes; the problem tree analysis and visualize the vote activities are useful for unpacking the grantee’s challenges and identifying the most significant causes and effects of those challenges.

To conduct a problem tree analysis, start with a problem statement:

1. 2 minutes: Individually, jot down on a sticky note the primary challenge/problem your SWFI program is trying to address.

2. 5 minutes: Share with your group and decide on one problem statement. The other problem statements can be explored later.

3. Using poster paper, easel, or whiteboard, write your agreed-upon problem statement in the center box.

4. 3 minutes: Individually, brainstorm all the potential causes of this problem (one per sticky note), and stick them on to the poster paper as you go, below the problem statement.

5. 3 minutes: Individually, brainstorm all the potential effects of this problem (one per sticky note), and stick them on to the poster paper as you go, above the problem statement.

6. 3 minutes: Review and reflect on what the group generated. For example, did team members come up with similar causes and effects? Feel free to cluster or consolidate any similar sticky notes. Are any causes or effects surprising?

To visualize the vote:

7. 1 minute: Using a small sticky note or sticker, each person votes for the cause and effect s/he sees as most significant or highest priority by placing the stickers on the larger sticky notes of choice. A facilitator should record the votes for most significant causes and effects.

8. 5 minutes: Pair and share. In small groups of two or three, discuss your reflections and what stands out to you about this exercise. For example, did team members agree on the most significant causes and effects? What were they? Did this exercise help you better understand the primary challenge/problem that your team explored? How did this activity help you understand the causes and effects of that challenge/problem?

See the next page for a full-sized Problem Tree Analysis example. Teams can repeat these activities with other challenges/problems identified during step 1 above.
“Learn” phase: Problem Tree Analysis example
Prepare for the Innovate phase

Activities in the Innovate phase will allow grantees to explore and co-create solutions to the challenges explored in the Learn phase; these activities will help grantees align the strategies they develop with their goals for success.

Refer back to the problem tree analysis example from the Learn phase on the previous page. In this example, the grantee focused on the following challenge: participants are completing training but are not receiving a post-training credential.

- In the Learn phase, grantees identified the **causes and effects** of participants completing training but not receiving a credential.

- In the Innovate phase, grantees will focus on **identifying potential solutions** to help participants complete training and receive a credential.

First Innovate phase activity: **Creative Matrix**

Grantees can use a creative matrix to explore potential solutions to the challenges they unpacked in the Learn stage. An example matrix follows on the next page.

1. As a first step, the grant team should come up with aspirational statements related to the highest priority causes identified in the Learn phase. For example, for a grantee whose primary challenge is that participants are completing training but not receiving a post-training credential, one identified cause was a lack of participant motivation. An aspirational statement in response to this might be: “How might we motivate 100 percent of participants to attain a credential?” Another identified cause was training that did not prepare participants for the credential exam; an aspirational statement in response to this cause might be: “How might we offer participants world class training?”

   - **When thinking of these aspirational statements, grantees can use the starter “how might we” to frame them.**

2. For the highest priority causes explored in the Learn phase (about 4-5 causes), add the corresponding aspirational statement as a column header on the creative matrix. (An example matrix follows.)

3. Next, the grant team should identify the broad categories of potential solutions that could be useful in achieving these goals and add them as labels to the rows on the creative matrix. “Technology & digital media”, “events & programs”, “people & partnerships”, and a catch-all category are useful categories for most grantees.
A catch-all category, such as the “wildcard” category in the example below, allows the team to capture ideas that don’t fit into one of the other categories.

4. Each member of the grantee’s team should take 4 minutes to individually brainstorm as many potential solutions for achieving each aspirational statement as possible, with one solution per sticky note. The focus of this exercise is on generating many ideas for consideration and further exploration, rather than refining a few ideas.

5. Each team member should place their sticky notes in the corresponding cells on the creative matrix, depending on whether their proposed solution relates to technology/digital media, events and programs, or other types of strategies.
“Innovate” Phase Example: Creative Matrix

- **Technology & Digital Media**
  - How might we make sure all participants receive the resources and support they need to be successful?
    - Provide every student a computer with tools and resources they can use
    - Weekly blast of helpful tools
    - Provide computers to practice

- **Events & Programs**
  - How might we offer participants world class training?
    - Virtual case management
    - Motivational interviewing by telephone
    - Text message reminders
  - Offer additional classes
    - Provide food
  - Events to provide motivation
    - Peer to peer tutoring

- **People & Partnerships**
  - How might we motivate 100% of participants to receive a credential?
    - Research school’s results prior to engaging them
    - Ask the business community what is their experience with schools
  - Industry speakers
  - Cohort training/orientations
  - Partner with CBOs

- **Wildcard**
  - Offer graduates a job at microsoft
Second Innovate phase activity: Impact-Effort Matrix

Grantees can use an impact-effort matrix to strategically prioritize investments in the strategies identified through the creative matrix. The impact-effort matrix will help grantees visualize the relative priority of ideas: ideas of high impact-low effort (“quick wins”), low impact-low effort (“can do’s”), low impact-high effort (“luxuries”), and high impact-high effort (“long-term investments”).

To create an impact-effort matrix, start with the ideas you generated in the creative matrix:

1. 2 minutes: Each person selects two ideas from the creative matrix that they see as the best ideas or most important.

   - For example, a team member may select “peer to peer tutoring” and “text message reminders” from the creative matrix in the previous activity.

2. 8 minutes: Focus on impact. As a team, discuss and come to consensus on ranking the set of priority ideas in a horizontal line. The idea perceived to have the least relative impact on improving the grant’s ability to reach its performance goals should be placed on the left hand side of the page; the idea perceived to have the greatest relative impact on improving performance should be placed on the right hand side. Each of the ideas should be placed next to each other along the horizontal line – no ties allowed!

   - The team may decide, for example, that “peer to peer tutoring” is more impactful than “offer a bootcamp or tutoring in house” but less impactful than “student mentorship”

   - The team may decide, for example, that “text message reminders” are more impactful than “offer an incentive for certification” but less impactful than “offer a bootcamp or tutoring in house”

3. 8 minutes: Now, turn the focus on effort. As a team, work together to move the sticky notes vertically based on the perceived level of effort it would take to carry out that idea (preserving the horizontal placement). The bottom of the vertical line reflects the lowest perceived level of effort with the top of the line representing the highest perceived level of effort. No two sticky notes should be on the same horizontal or vertical plane. For example:

   - The team decides that “peer to peer tutoring” will require more effort than “text message reminders” but less effort than “Certblaster”

   - The team decides that “text message reminders” will require more effort than “marketing department could create newsletters to encourage them” but less effort than “prize giving/dinner for those who graduate”
4. Finally, draw a vertical line and a horizontal line down and across the middle of the page to create four quadrants. Interpret your matrix as a team by examining where your ideas fall in the four quadrants of the impact-effort matrix: high impact-low effort ("quick wins"), low impact-low effort ("can do's"), low impact-high effort ("luxuries"), and high impact-high effort ("long-term strategies").

See the full-sized Impact-Effort Matrix example on the next page.
“Innovate” Phase Example: Impact-Effort Matrix

High effort

Luxuries
- Have alumni get together

Long-term investments
- Student Mentorship
- Online Tutoring
- Offer a bootcamp or tutoring in house

Can dos
- Marketing department could create newsletters to encourage them
- Prize giving/dinner for those who graduate
- Text message reminder
- Offer an incentive for certification

Quick wins
- Certblaster
- Peer to peer tutoring

Low effort

Low impact
- High impact
Take some time to reflect on the outcomes of this activity. As a group, consider how the activity helped your grant team prioritize your ideas. Was there consensus on the activities that would have the greatest impact and take the least amount of effort? Those “quick wins” may be good candidates to get started with road testing, which happens in the Improve phase.

The following resources may be useful for grantees interested in further exploring program change through the LI² framework.

**Additional resources on LI² and Human Centered Design**

- **Learn, Innovate, Improve (LI²): Enhancing Programs and Improving Lives (Practice Brief)** is a practice brief describing the LI² process.

- **The Learn Phase: Creating Sustainable Change in Human Services Programs** is a practice brief that provides an overview of the first phase of LI²—the Learn phase—which is intended to lay the foundation for successful and sustainable program changes.

- **The Innovate Phase: Co-Creating Evidence-Informed Solutions to Improve Human Services Programs** is a practice brief that provides an overview of the second phase of LI²—the Innovate phase—which is intended to help human service program administrators and researchers generate new and innovative ideas to address pressing challenges.

- **The Improve Phase: Using a Road Test to Improve Human Services Programs** describes a process for designing and conducting analytic pilot tests of new strategies. An on-demand webinar describes this process in detail.

- **The IDEO Field Guide to Human Centered Design** includes 57 user friendly design activities and several case studies on human-centered design in action.

- **Mural** is an online visual workspace that grantees can use to collaborate on activities, such as the creative matrix, even if team members are not in the same room.