INTRODUCTION

This toolkit provides a practical framework and tools for helping work groups of any size learn from their own experience in a way that informs better decisions and more effective behaviors and actions over time. This overview will help School/unit leaders and managers across Harvard, in partnership with their CWD and HR colleagues, apply real-time learning practices that accelerate their progress on achieving the organizational goals that matter most to them. Called “Emergent Learning,” as developed by Fourth Quadrant Partners, this method and toolset draws significantly on adult learning and organizational learning theory and on the US Army’s After Action Review process.

The Emergent Learning Framework can be used to help groups make breakthrough progress on the outcomes that matter most to them by giving them a way to collectively:

- Explore the data most relevant to their objectives (from multiple legitimate perspectives)
- Surface new insights about what has worked and what hasn’t
- Design action hypotheses that leverage the experience and wisdom of the group
- Commit to strategic action and disciplined assessment of results

FOUR CORE TOOLS OF EMERGENT LEARNING:

1. **Emergent Learning Tables.** A framework for structured conversations that make it possible for a group to come together and ask, “What do we know so far?” with regard to the Framing Question they have identified. In articulating what they know so far, groups make their collective knowledge visible to one another in a way that allows them to apply it to future work.

2. **Framing Questions.** To create a clear focus for collective learning, groups establish a framing question that:
   - Ensures that the conversation is focused on something that matters to the entire group
   - Creates a forward-focused and action-oriented context
   - Makes explicit the implicit assumptions embedded in the group’s thinking
   - Tests for connection to strategy
3. **Action Hypotheses.** Groups articulate “If…then…” statements that make visible and explicit their thinking about what actions they believe will lead to specific results. “If (we take this action), then (we expect this result).” By making that proposition explicit—a doable action and a testable result—groups can test it and learn together.

4. **Before Action Reviews and After Action Reviews (BARs and AARs).** A set of simple, straightforward questions to ask before and after important events that may be as small as a meeting or as large as a major project. BARs help you clarify your intentions and set yourself up for success. AARs help you identify success factors and course corrections that will help you move forward with greater intention and impact. The regular practice of conducting BARs and AARs, whether with one other person or with a group, cultivates a learning mindset that extends beyond any one lesson learned to a sustained capacity for adapting to environmental changes. Paired with Emergent Learning Tables, BAR and AAR create a framework for learning together over time.

### WHEN TO CONVENE AN EMERGENT LEARNING TABLE SESSION

Groups who wish to learn from and improve their results over time can opt to engage in a facilitated Emergent Learning Table session at any important punctuation point in the course of an initiative or effort. For example:

- **During the planning of an initiative,** an EL Table session helps ensure that lessons from similar past efforts inform the thinking that goes into the new effort.

- **Midway through an initiative,** an EL Table session helps a group check on and update their thinking by learning from what has happened so far, and correct course as they proceed with the initiative.

- **At the end of an initiative,** an EL Table session can help a group document what they have learned to inform future efforts and to share their learning with others.
While the structure of the EL Table is straightforward, facilitating an effective EL Table conversation can be challenging and full of nuances. In convening the EL Table session, there are some important design questions for group leaders and facilitators to consider:

- **Are the right people in the room?** The session should include those responsible for strategic direction and those responsible for doing the work (there is often lots of overlap in roles) so that lived experience and highest intention relative to the Framing Question are both represented in the conversation.

- **Are people free to speak up?** While the session may include people of varying degrees of formal authority, effort should be made to limit the power dynamics in the room in order to maximize the range of perspectives represented.

- **Have the group members themselves crafted the Framing Question** and is the Framing Question really the right point of focus for the group? (See “About Framing Questions” below)

- **Is the space conducive to visual learning and reflective conversation?** Since the fundamental power of EL lies in making the implicit explicit, it is important that group members actually “see” each other’s observations and insights displayed side by side. The group’s ability to step back, pause, and consider the whole picture from multiple perspectives requires a space that allows for both seeing and reflecting.

- **Have you consulted or enlisted an experienced, objective facilitator to assist with the conversation?** You won’t always need an outside facilitator, particularly as you gain confidence in regularly incorporating these kinds of learning practices into your work. When the stakes are high or the conversation is a complicated one, it is nice to know that you have resources in the Organization Development team at CWD or your HR office to help you structure and conduct these conversations carefully.

* If conducting the session in a remote environment, explore tools such as MURAL, that enable online collaboration on a visible board. Depending on the number of participants, you will also likely take advantage of the breakout room features of your remote meeting platform to ensure that all voices can contribute to the conversation by subgrouping to inform the full group discussion.
The duration of an EL Table session will vary according to the size of the group, the complexity of the question, and the volume of stories and data that will be shared. In general, you should expect the group to spend about as much time reflecting on Data and Insights as it does looking forward by identifying Action Hypotheses and Opportunities to test them. For a short EL Table session, you might expect to spend about 30 minutes on each quadrant; for a more complex conversation, you could spend a couple of hours in each quadrant or even half a day on each for a two-day retreat.

**Step 1.** *Agree on the Framing Question* and post it high on the wall above a large 4-quadrant table labeled as shown in the illustration below.

**Step 2.** *Populate the Data and Stories quadrant.* While you can enter the table through any quadrant, you will typically start a session in the lower left corner and then move clockwise through the table. Start by inviting group members to share Stories and Data relevant to the Framing
Question by posting sticky notes on the board. The Stories and Data quadrant captures stories about what happened in the past. It focuses on actual results—what worked and what did not. It may include quantitative measures, dates and decisions, and people’s direct experience of events.

**Step 3. Populate the Insights quadrant.** The second quadrant captures our thinking, interpretation, or insights about what happened in the past. What meaning do we make about the data or the results that were achieved? For example, an observation in the Data and Stories quadrant that a key stakeholder wasn’t consulted until week 6 of a project may lead to the insight that this key stakeholder might have felt more invested if she’d been engaged with earlier. Or, a story about deliverables being delayed at each project milestone may generate the insight that we may have underestimated the effort required of team members in parallel with their regular duties.

**Step 4. Populate the Hypotheses quadrant.** The third quadrant shifts our attention from past to future, as we translate our observations and insights into testable theories about what we think will lead to greater success going forward. For example, taking the insight that we may have underestimated the effort required of team members, we might formulate a hypothesis that reads: “If we allow more time between milestones, then we can expect to complete milestone deliverables on time.” Or, alternatively, “If we enlist more people [or carve out dedicated time, or narrow the scope of the effort, etc.], then we can expect to complete milestone deliverables on time.”

**Step 5. Populate the Opportunities quadrant.** The fourth quadrant moves us into action by documenting the near-term opportunities we see for testing our hypotheses. Most effective is to start with what already exists—an event that is already on someone’s calendar or an event that is likely to happen. Add new actions only when it is necessary. This quadrant is not about traditional action planning (“What should we do?”). It is about applying lessons learned to work that is already planned.
ABOUT FRAMING QUESTIONS

Getting everyone on the same page, and facing forward

A good Framing Question creates a focus for collective learning—both in the immediate learning activity and, more important, over time, helping people to think jointly about how they can tackle a specific challenge or what it will take to achieve a desired outcome. It typically starts with “What will it take to…” or “How can we…”

The framing question must be relevant to the people doing the work. When consulting with them, help them select a question that addresses their concerns constructively by being forward-looking, open-ended, specific and clear.

Look for ways to help them refine their question to avoid circular conversation and maximize momentum for new action experiments.
### Framing Questions Table 1

<table>
<thead>
<tr>
<th>Weak Question</th>
<th>Reason</th>
<th>Better Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why don't School leaders support this approach?</td>
<td>Retrospective and analytical questions lead to debate and fault-finding, but no movement forward.</td>
<td>What will it take on our part to get School leaders to support this initiative?</td>
</tr>
<tr>
<td>How do we build stakeholder alignment?</td>
<td>Big, abstract questions tend to lead to big, abstract conversations.</td>
<td>How can we help all the Deans and Directors agree on common goals for this initiative?</td>
</tr>
<tr>
<td>What will it take to get these leaders to let go of their fiefdoms?</td>
<td>Questions with embedded assumptions about the cause of the problem limit the group’s focus and options.</td>
<td>What will it take on our part to help these leaders understand each other’s needs?</td>
</tr>
<tr>
<td>How can we get these leaders to meet with each other every month?</td>
<td>Questions with embedded solutions limit the group’s options and may be seen as trivial or irrelevant. They fail to answer the <em>so what?</em> question.</td>
<td>How can we ensure that these leaders are effectively communicating with each other regularly?</td>
</tr>
<tr>
<td>How can we communicate our message, get buy-in, and build momentum on our schedule so that slips do not affect ultimate deliverables?</td>
<td>Compound questions make the group learning process unnecessarily complex.</td>
<td>How can we ensure that delays caused by external circumstances don’t affect our ultimate deliverables?</td>
</tr>
</tbody>
</table>
ACTION HYPOTHESES

If we do [this], then we expect [this] to happen…

Well formulated hypotheses are essential to learning in real time. Scientists understand a hypothesis as a proposed explanation of phenomena based on evidence from the past. In Emergent Learning, we look ahead to explain what we expect to happen as a result of future action. In both cases, the goal is to articulate something that is testable.

One problem that we commonly see when we’re trying to help a client group commit to new behaviors or new actions is that they are operating from an incomplete hypothesis:

- “We need to ensure that all decisions are data-driven!” — Sounds good, but why? (missing testable result)
- “To be successful, initiatives must establish a high level of stakeholder engagement.” — Successful in what way? (vague result)
- “We need to strive for equality.” — What would that look like and what will it take to get there? (missing action; vague result)

Groups that learn how to express complete hypotheses and get comfortable with inquiry about the hypotheses are better able to get all their thinking on the table. Benefits include:

- The group is able to test for clarity, validity, and alignment around outcomes
- Members of the group can post alternative paths for reaching outcomes and keep these paths in mind as the work unfolds
- The group is better prepared to adapt when reality demonstrates that the planned action will not succeed
- Group members can test the validity of their thinking against actual results, which allows them to refine their thinking about their next action
Deceptively simple questions for setting intention and assessing results

**Our Framing Question:** (What will it take to...? How can we...?)

<table>
<thead>
<tr>
<th>Before Action Review</th>
<th>After Action Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are our intended results?</td>
<td>What were our intended results?</td>
</tr>
<tr>
<td>What will success look like?</td>
<td>What were our actual results?</td>
</tr>
<tr>
<td>What challenges might we encounter?</td>
<td>What caused our results?</td>
</tr>
<tr>
<td>What have we learned from similar situations?</td>
<td>What will we sustain or improve?</td>
</tr>
<tr>
<td>What will make us successful this time?</td>
<td>What is our next opportunity to test what we learned?</td>
</tr>
<tr>
<td>When will we do an AAR?</td>
<td>When will we do our next BAR?</td>
</tr>
</tbody>
</table>

Facilitated Emergent Learning Table sessions require some investment of time and planning and are well suited for learning across a range of experiences. BARs and AARs, by contrast, are light, flexible tools that can be used alone, with a partner, or with a small group to support learning over time. They can be completed quickly (sometimes in as little as ten or fifteen minutes), making them practical for frequent use.

Record your responses to the questions before and after a key action or event. You may find it useful to maintain a learning log—a journal where repeated BAR and AAR reflections may start to reveal a pattern that raises your learning awareness and intention to new levels. Notice the recursive nature of the tool, as each one points you to the next iteration of the other.
APPLICATIONS

Some examples of how Real Time Learning Tables have been used at Harvard include:

- A group of twenty-one HR and OD leaders and consultants, representing a cross-section of Central Administration and School perspectives, used an Emergent Learning Table to assess the effectiveness of the FY16 Employee Engagement survey process from its design through the distribution of results. By exploring together the framing question “What will it take to improve the survey process next time so that it is easier to implement, strengthens our partnership, and delivers better results?” the committee was able to identify specific opportunities for improvement in the future use of surveys as a central component of the continuing Employee Engagement campaign.

- The Steering Committee for the President’s Administrative Innovation Fund (PAIF) used an Emergent Learning Table to review their experience with administering the Fund’s inaugural round of seed grants. By exploring together the framing question, “What will it take to maximize the impact of the PAIF this year?” the group uncovered insights and hypotheses that would shape their decisions regarding such things as how they would set criteria and use subject matter experts in the review process for future rounds of funding.

- The HUIT Senior Leadership Team used an Emergent Learning Table to fine tune their commitment to address concerns identified in the organization’s FY16 Employee Engagement survey results. As with all University Schools and units, HUIT leaders saw room for improvement in their scores related to trust in senior leadership. To identify their highest leverage opportunities for specific behavioral change, they chose the framing question, “What will it take to evolve HUIT 3.0 in a way that honors our value of openness to build our people’s trust in us as senior leaders?”
The tools of Emergent Learning are intentionally simple, but their power rests in an understanding of the principles that inform them. We encourage you to read these articles:

- **Emergent Learning: A Framework for Whole-System Strategy, Learning, and Adaptation**  
  Darling, Marilyn; Guber, Heidi; Smith, Jillaine; Stiles, James  

- **Learning in the Thick of It**  
  Marilyn Darling, Charles Parry, Joseph Moore  

*This brief toolkit is drawn from Fourth Quadrant Partners’ “4QP Guide to Emergent Learning,” a 150-page workbook used for certification purposes. No certification is required to use the tools and frameworks included here. 4QP requests attribution be included on any print or electronic materials that reference the 4QP Emergent Learning Platform(R) and its components as 4QP has defined them.

For help with applying these tools and frameworks with your team or your client teams at Harvard, please feel free to contact Vicky Schubert, Sr. Organization Development Consultant, and certified Emergent Learning practitioner; 617-495-3602.