**Purpose:** Sustaining mathematics pathways at scale requires a deep pool of faculty to teach the courses and to serve as leaders and mentors. Many innovations fail or discontinue because they are dependent on a few individuals who cannot sustain or grow the work over time. This tool is intended to help a small team think strategically about how its institution might provide supports to build faculty capacity in terms of breadth (increasing numbers of faculty involved) and depth (building leadership and expertise). While the tool specifically refers to math faculty, it can be applied to staff and faculty in other areas.

**Users:** Administrators, math faculty

**Process-at-Glance**:

* Part I – Identify and prioritize strategies to engage faculty in implementing math pathways.
* Part II – Identify strategies to build leadership and expertise.
* Part III – Make a plan.

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| **Part I: What do faculty need in order to engage in math pathways implementation?** |

**Instructions:** The following content is based on *Faculty Orientations Toward Instructional Reform*, a publication of the Scaling Innovation project conducted by the Community College Research Center. We recommend that the team read this short article, which is available at <http://ccrc.tc.columbia.edu/publications/faculty-orientations-toward-instructional-reform.html>.

The Scaling Innovation project found that when faced with an innovation, faculty tend to fall into three categories of readiness to engage: *ready to act*, *ambivalent,* or *reluctant to change*. Within those categories, the researchers identified the most common reasons for the level of readiness. These categories are summarized in the table on the next page.

Categories of readiness should not be viewed as a judgment on a faculty member’s professionalism or commitment to students. The Scaling Innovation researchers note that “on the surface, ambivalence and reluctance can appear as apathy and obstructionism; however, our data suggest that faculty largely have rational and legitimate reactions to reform” (p. 3).

We view these categories as a way to understand those reactions from faculty and to identify what they *need* in order to engage with the work. We also note that all faculty—even those who are eager to engage—need support to sustain them through the challenges of making meaningful change individually and institutionally. For example, a passionate faculty member may feel discouraged by what he or she might perceive as a slow pace of change or by not having meaningful opportunities to contribute to the work.

1. Work collaboratively with a group to brainstorm supports that faculty in each category might need.

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| **Faculty who are ready to act** | |
| **May feel . . .** | **Might need . . .** |
| My teaching philosophy and current practice are aligned with reform philosophy. |  |
| I’m willing to change, but I need support. |  |
| I want to participate but not necessarily because I believe in the reform. |  |

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| **Faculty who are ambivalent** | |
| **May feel . . .** | **Might need . . .** |
| I have other professional priorities. |  |
| I want to see evidence of effectiveness. |  |
| I don’t know if I can do this well. |  |

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| **Faculty who are reluctant to change** | |
| **May feel . . .** | **Might need . . .** |
| I am satisfied with the status quo. |  |
| I don’t believe this reform will be effective. |  |
| This reform is not consistent with my beliefs about my role, teaching, and/or students. |  |

1. Where do you think most of your faculty fall within these categories? Draw asterisks by the top four or five items in the “Might need” column in terms of number of faculty. *Reminder: Avoid making judgments about individuals’ commitment and professionalism.*
2. Review the list and look for “high impact” strategies—that is, strategies that have the potential to have a large impact in terms of:

* Number of people who engage.
* Amount of change within individuals.

Especially look for strategies that might be effective for multiple categories.

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| **Part II: Building champions and experts** |

**Purpose:** Your local champions and experts are the greatest strength that your institution has in implementing math pathways. These people are also the leaders who will do the extra work that comes with implementing change and will help build interest and excitement. We view these roles in the following way.

Champions are passionate and articulate about how math pathways can change students’ lives for the better. They are eager to advocate for the work and are effective communicators. Champions might emerge from other groups as well. For example, student support staff or faculty in other disciplines might be champions because of the positive impact they see on students.

Experts are the people who delve deeply into the work and want to continually learn more. They will devote time to improving materials, researching ideas, and connecting with other implementers.

Some people are both champions and experts while others are most comfortable in one role or another. You likely have both at your college. This tool will help you continue to support these individuals and also help you strategically create opportunities for new champions and experts to emerge.

**Instructions:** Discuss the prompts below with a small group.

1. Identify possible activities. A list of activities that might help engage potential champions and experts is provided on the next page. A list of activities offered through the DCMP and the Dana Center is also included.

* Review the list and add your own ideas.
* Draw asterisks by items that you think are most effective and could help fill other needs in the project.

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| **Activities to Engage Champions and Experts** | |
| **Champions may want to . . .** | **Experts may want to . . .** |
| * Present to internal and external groups. * Serve as a mentor or trainer. * Give demonstration lessons. * Write articles. * Invite others to observe their classes. * Lead discussion groups. | * Research a topic. * Develop or revise materials. * Serve as a mentor. * Write articles. * Network with other practitioners. * Attend learning opportunities. |
| **DCMP/Dana Center Opportunities for Champions and Experts** | |
| * Curriculum development – The Dana Center accepts applications for authors and reviewers when starting development of a new curriculum. * Faculty training/mentorship   + Informally: Faculty are encouraged to participate in the online discussion forums and to share ideas and materials with one another.   + As a trainer/mentor: The Dana Center often invites veteran faculty to help train new faculty and asks veterans to address individual questions and concerns from new faculty.   + As a participant: The Dana Center offers different types of learning opportunities. * Conferences – The Dana Center encourages faculty to submit proposals to present about their experiences with the DCMP. The Dana Center will help provide DCMP materials and, in some cases, can help defray expenses. * Focus/working groups – The Dana Center occasionally convenes groups to give input on a particular topic or to help develop a strategy to address an issue.   ***Are your faculty informed about these types of opportunities? Announcements typically are sent to the liaisons your college has identified or through the Dana Center email list.*** | |
| **Additional Ideas** | |
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Plan for options for champions and experts. You may want to think about outreach in two ways: 1) targeted outreach to specific people; and 2) open opportunities that may encourage others to move into leadership roles.

**Targeted outreach:**

* Identify current and emerging champions and experts.
* Identify activities that might engage these individuals. Refer back to Step 1 to review possible activities, especially those that would help fill existing needs.
  + Consider if your current champions and experts feel they have appropriate opportunities to contribute to the project or if they desire or can benefit from new activities.
  + Consider if emerging leaders need interim supports. For example, before making a solo presentation, an emerging leader might be paired with a veteran to make a joint presentation.

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| **Name** | **Champion** | **Expert** | **Possible Activities** |
| Current | | | |
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| Emerging | | | |
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**Open outreach:**

* Identify activities you would like to be open to all faculty. Consider whether there would be any qualifying requirements or application process.

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| **Activity** | **Notes on Requirements for Participation** |
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1. Consider resources and commitments. The following prompts will help you consider other issues related to building faculty capacity and leadership.

* What resources (e.g., financial, time, people) are available to support the activities you identified above?
* What opportunities do you have to obtain additional resources?
* What commitments should faculty be expected to make if they participate in an activity? For example, if the college supports a faculty member to attend training, is that participant responsible for disseminating information from that training session?

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| **Notes on Resources and Commitments** |
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| **Part III: Making a plan** |

**Instructions:** Review the discussion from Parts I and II to identify priorities. Create an action plan for building faculty engagement and leadership. Include time to review and repeat this planning process to continue building faculty capacity.

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| **Action** | **Who is responsible?** | **Deadline** |
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| Review and repeat this planning process. |  |  |