

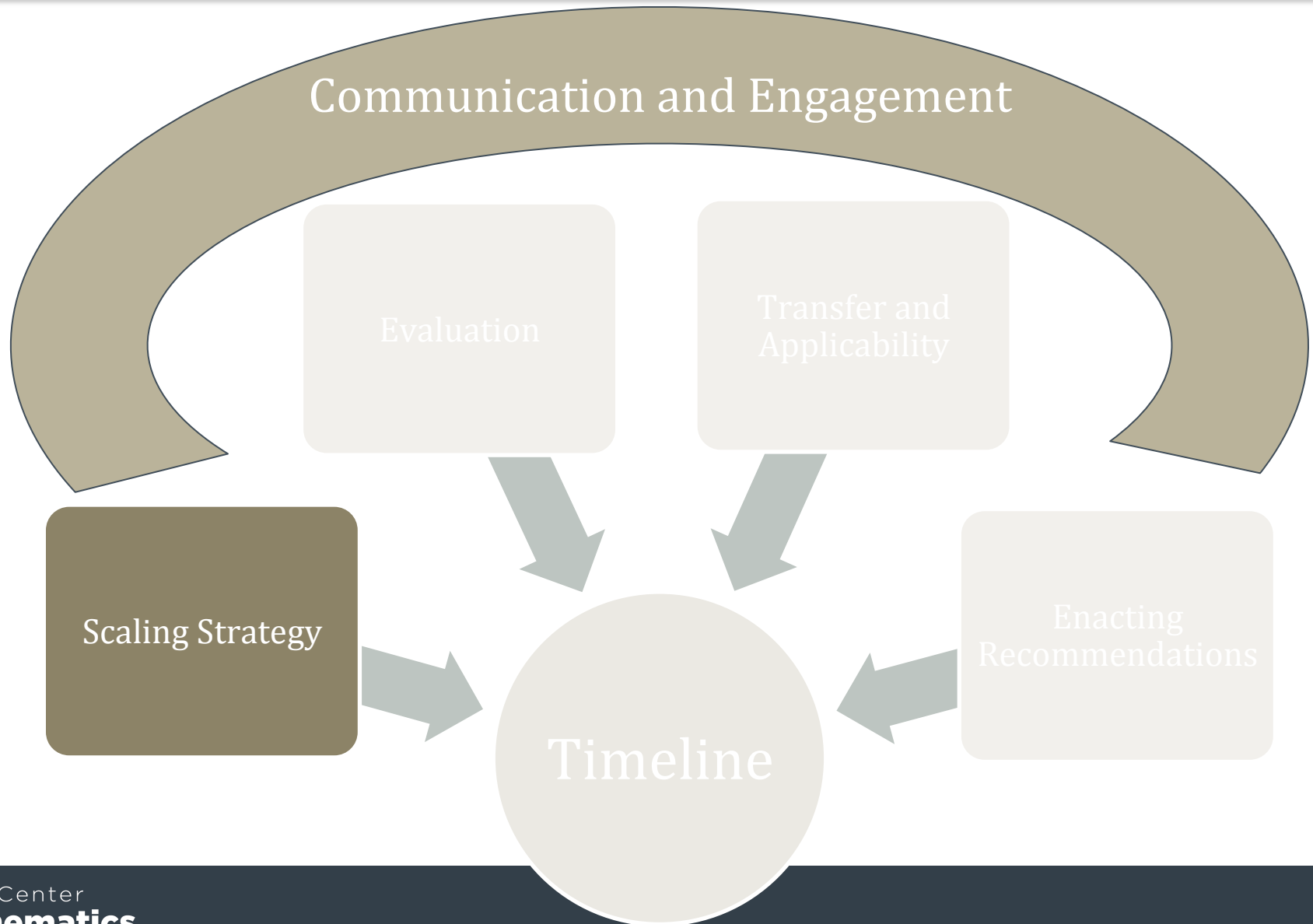
Dana Center
Mathematics
PATHWAYS

DCMP Leadership Academy: Day 2

October 19–21, 2016
San Antonio, Texas



5 Major Areas of Planning



Phase 2 Expectations: Scaling

Objective for 2016–2017

A cohort of institutions commits to implement pathways no later than Fall 2018 (earlier is preferred).

Scaling Strategies

Things to consider:

- Number of institutions and resources available
- Current progress: More about new implementation or scaling existing implementation?
- Factors that will support or hinder implementation: Geography, existing networks, other initiatives, etc.

Approach #1: All in

Pros	Cons
Communicates commitment to scale and expectation that all institutions implement.	Challenging to support and monitor.
Moves system together; can help address issues of alignment and articulation.	Lack of direct monitoring can lead to poor follow through and lack of fidelity.
Builds on momentum if institutions are already engaged.	Can be interpreted as a mandate.

Approach #2: Strategic Cohorts

- Cohorts are recruited based on a strategy that supports scale.
- Recruit 2- and 4-year institutions as a group based on transfer patterns or other existing relationships.
 - Regional
 - Networks or systems
 - Initiatives
- Not based on who volunteers – but volunteers can still participate!

Approach #2: Strategic Cohorts

All institutions receive some level of strategic communication and support.

- Can ask for different levels of commitment.
- Identify liaisons at each institution. Support liaisons to build interest.
- Set goals for moving all institutions to implementation.

Approach #2: Strategic Cohorts

Pros	Cons
Targets most effective resources.	Challenging to engage later cohorts.
Establishes early exemplars.	Gives an “out” for institutions that do not want to commit.
Easier to evaluate small number of sites.	
Allows flexibility for institutions.	

MPC Expectations

- Number of institutions decided jointly between task force and Dana Center
- Combination of 2- and 4-year
- Documented commitment to clear deliverables
- Monitor and evaluate.
 - More students enrolled in the “appropriate” math pathways; more succeeding.
 - “Appropriate”: clear defaults, advising processes, % of students in courses reflect the % of programs

Planning for Scale, Part III

Section A: Timeline and strategy for scaling across institutions.

Section B: Define the process for implementation.

Planning for Scale, Part III Example

Part III of the plan for scale includes:

- Scaling strategy
- Timeline with major milestones and activities

Discussion:

- Who should draft the different parts?
- What information/input would they need?
- Who should review/vet?

Dana Center Supports and Resources

- Designing Math Pathways Workshop
- The Case for Math Pathways
- Resource Site

Hosting a Dana Center Workshop: General Information

The Dana Center offers a small number of workshops to support implementation of math pathways, designed for institutional teams within a state or region. Each workshop has standardized content with some flexibility to customize in terms of change of emphasis and integrating local information. We are not able to create new content on local request.

We work collaboratively with the local host to plan the workshop. To do this effectively, we establish responsibilities up front.

Planning

Collaborative Decisions	Dana Center Responsibilities	Host Responsibilities
<ul style="list-style-type: none"> Number of participants Date and schedule Customization of content Timeline for milestones 	<ul style="list-style-type: none"> Document and communicate shared decisions Contract for services if applicable 	<ul style="list-style-type: none"> Check date against potential local conflicts and needs Approve contract if applicable

Logistics

Collaborative Decisions	Dana Center Responsibilities	Host Responsibilities
<ul style="list-style-type: none"> Determine responsibility for workshop registration (there is an extra fee if the Dana Center manages reservations) Responsible party will send updates on registration on specific dates 	<ul style="list-style-type: none"> Communicate facility needs Plan and pay for facilitator travel Ship materials to facility 	<ul style="list-style-type: none"> Cover all meeting costs Book facilities and provide food as appropriate Designate a liaison at the facility for the Dana Center Provide a person to staff a registration desk at the workshop

Outreach

Collaborative Decisions	Dana Center Responsibilities	Host Responsibilities
<ul style="list-style-type: none"> Dana Center will consult on outreach strategies as needed 	<ul style="list-style-type: none"> Provide informational materials: workshop flyer, summary agenda 	<ul style="list-style-type: none"> Distribute outreach materials Recruit participants <p>The host must guarantee a minimum number of participants by a certain date – these requirements will be set in the planning phase.</p>

Dana Center Supports: Coming Soon

- New Program of Study Briefs: Business and Elementary Education (by November)
- Recommendations for process to set learning outcomes (by December 1)
- “Rigor” brief (January)
- Periodic updates on new resources



Mathematics for pre-service elementary (K–5) teacher education:

Recommendations from professional organizations and requirements from the higher education sector

Pre-service elementary teacher education in the United States

The mathematics education of elementary school teachers is a complex and critically important enterprise. Mathematics professional associations and mathematics education organizations, including the Conference Board of the Mathematical Sciences (CBMS), the National Council of Teachers of Mathematics (NCTM) and the National Mathematics Advisory Panel (NMAP), have reached broad consensus on the mathematics content and process standards that educators need to teach mathematics effectively in grades

We provide these briefs to inform institutional discussions about the modernization of mathematics course requirements.

Each brief examines what constitutes relevant math for various majors (thus far, nursing, communications, criminal justice, elementary teacher education, and business) by examining professional organization recommendations and institutional requirements.

Deliverables on Timeline: Scaling, Part III

Required:

- Submit “Plan for Scaling, Part III: Strategy and Objectives.”
- Schedule Designing Math Pathways Workshop

Discretionary:

- Activities prepare the submission of the plan?
- Related communication and engagement activities?

What supports do you need? → Add to list.

Transfer and Applicability

The Missing Piece

Transfer

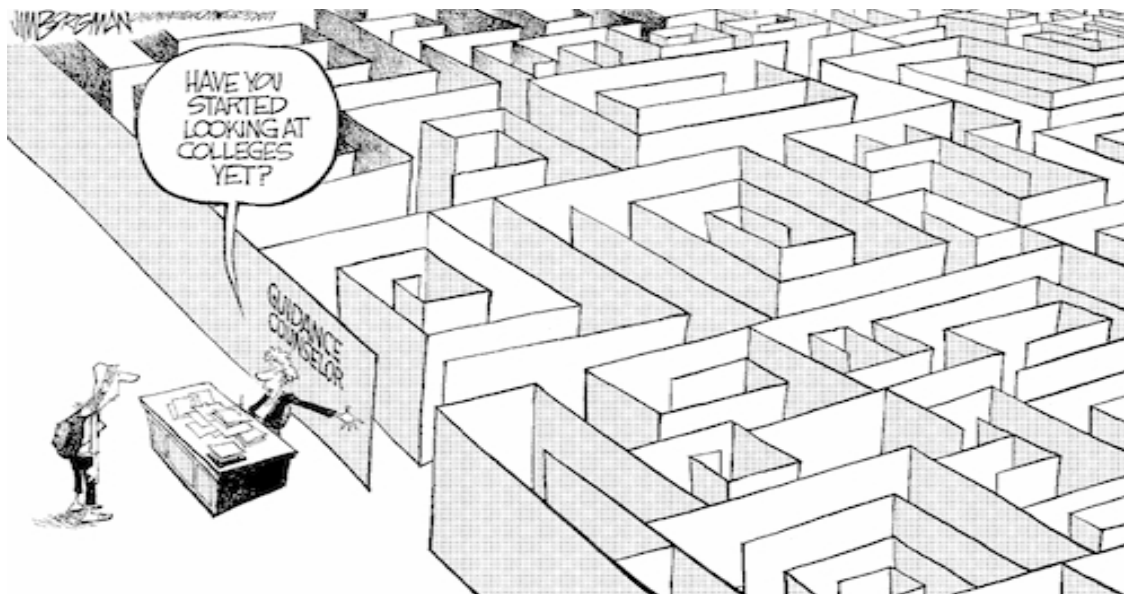


Applicability

Shel Silverstein, *The Missing Piece*, 1976

The Goal

Increase student success in entry-level college mathematics, and the completion of a degree or certificate with real labor market value, regardless of program or type of institution.



The Problem

Transfer pathways are not always predictable and the applicability of mathematics courses to majors across institutions and disciplines are not always recognized.



The Answer?

It's complicated . . .

- Common course numbering? General education core? Learning outcomes? All of these can help. However . . .
- Even the best designed transfer policy will fail if it is not appropriately applied across systems, institutions, and disciplines.

Transfer and Applicability

It's not just about mobility – applicability is crucial.

- With the exception of Michigan, all MPC states have a policy that guarantees statewide transfer of an associate's degree. Arkansas, Massachusetts, Missouri, and Oklahoma have a transferable core – yet the issue persists . . .



Cool Hand Luke, Warner Brothers, 1967

Key Themes and Issues

Data

- Tracking total student transfer between institutions by major can illuminate current transfer paths and focus strategies.

Key Themes and Issues

Policy

- Distrust of legislation
- Policy on paper does not translate to policy in practice.

Key Themes and Issues

Oversight

- Authority of agencies to govern transfer varies greatly from state to state.

Next Steps

Data Collection

- ✓ States gather the info; Dana Center does the synthesis and analysis

Policy Scan

- ✓ Point us in the right direction (links to statutes, board policies, institutional agreements), and we will do the rest.

Inventory of Initiatives that Impact Transfer

- ✓ Avoid duplication of efforts and coordinate with what is already there.

Next Steps

Working Group

- ✓ Recruit 5-6 stakeholders directly involved with transfer and applicability – more than just math faculty
- ✓ Attend a one day launch event facilitated by the Dana Center – data/policy summary, strategies for success
- ✓ Agree to convene at least three times for check-in meetings facilitated by the Dana Center

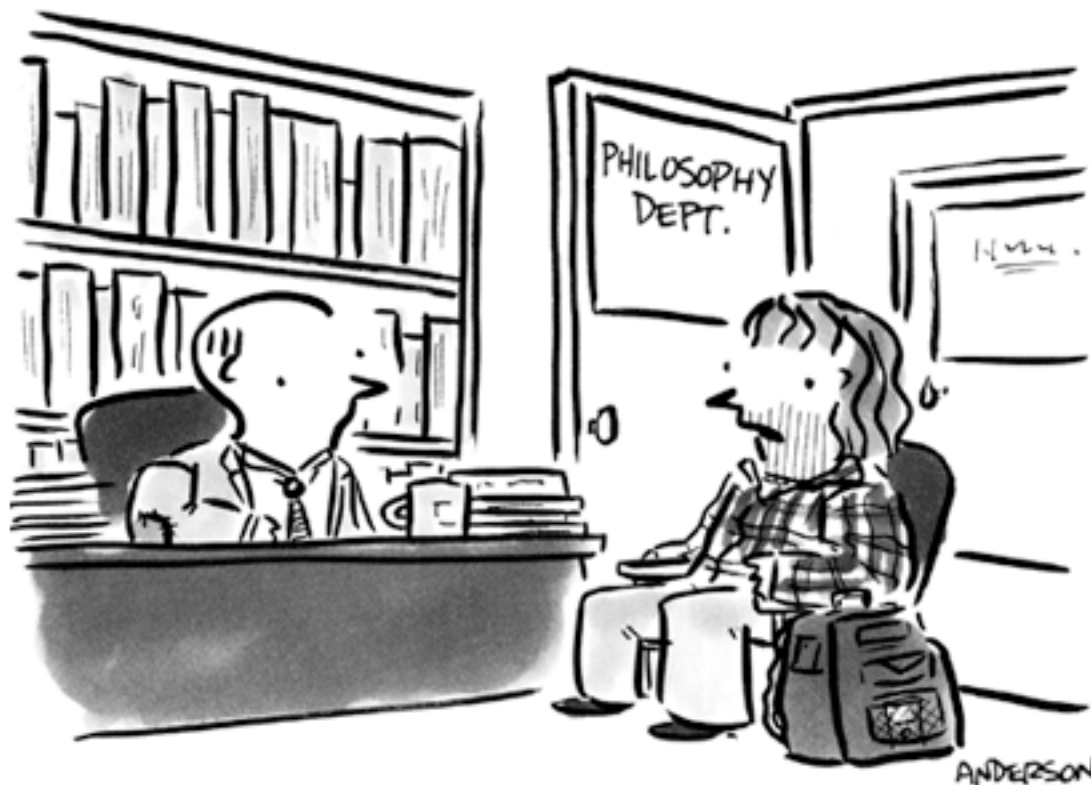
The Plan

Create a process for how to best build statewide agreement around the transfer and applicability of mathematics pathways (transfer agreements, MOUs, student learning outcomes, meta majors, etc.)

Questions?

© MARK ANDERSON

WWW.ANDERTOONS.COM



"I'm thinking of transferring to another school of thought..."

Mark Anderson, School Cartoon #5935

What is Missing?

Finalize timeline on poster:

- Review your task force recommendations.
Are there still key activities missing?
 - Working groups?
 - Policy changes?
 - Communications and engagement events?

Deliverables on Timeline: Transfer/Applicability

Required:

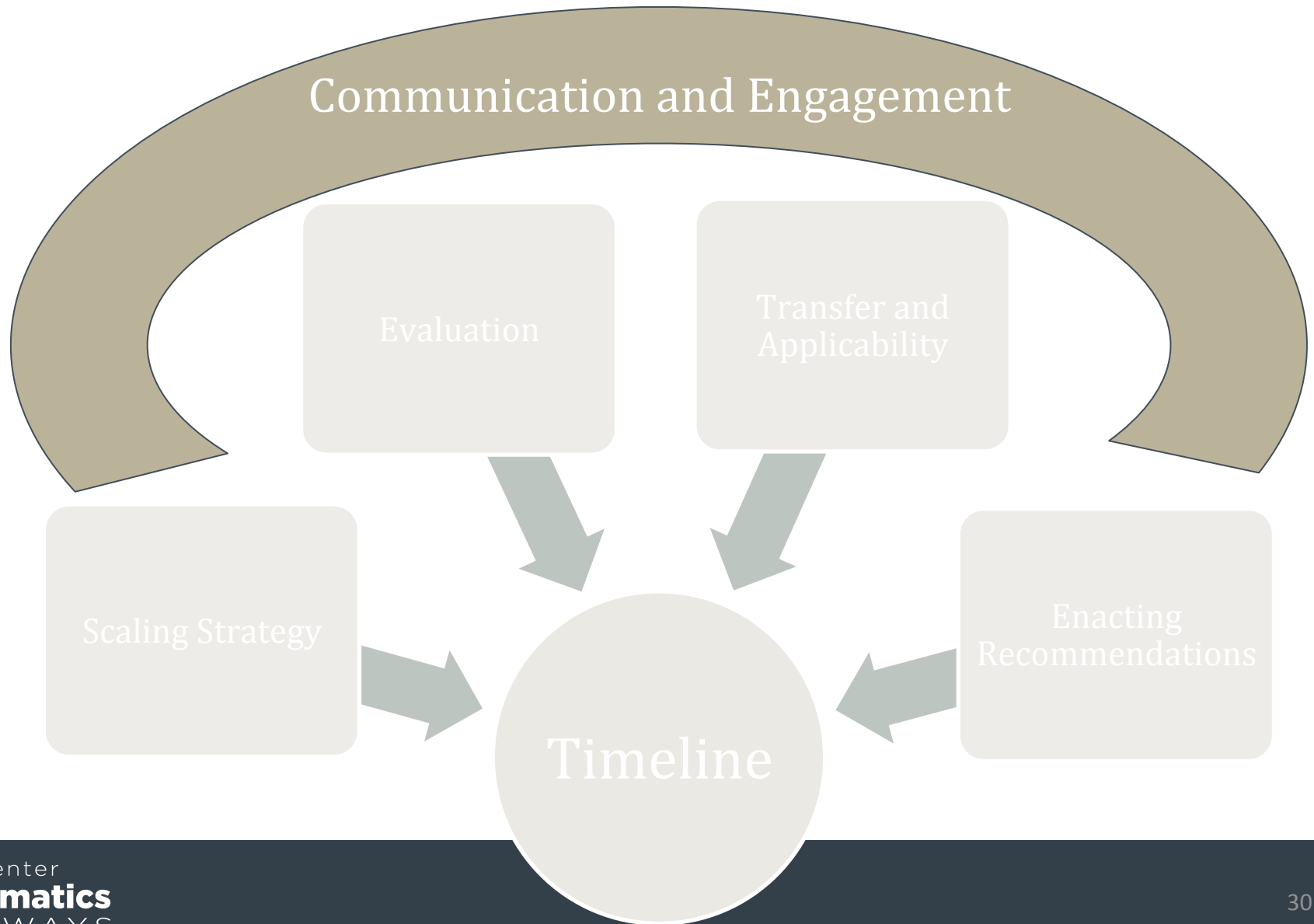
- Complete transfer preparation work (e.g., data collection, policy scan, and inventory of other initiatives)
- Identify initial transfer working group meeting
- Submit Transfer and Applicability plan

Discretionary:

- Related communication and engagement activities?
- Review your task force recommendations. What other activities, milestones are needed? (Working groups, events, policy changes, etc.)

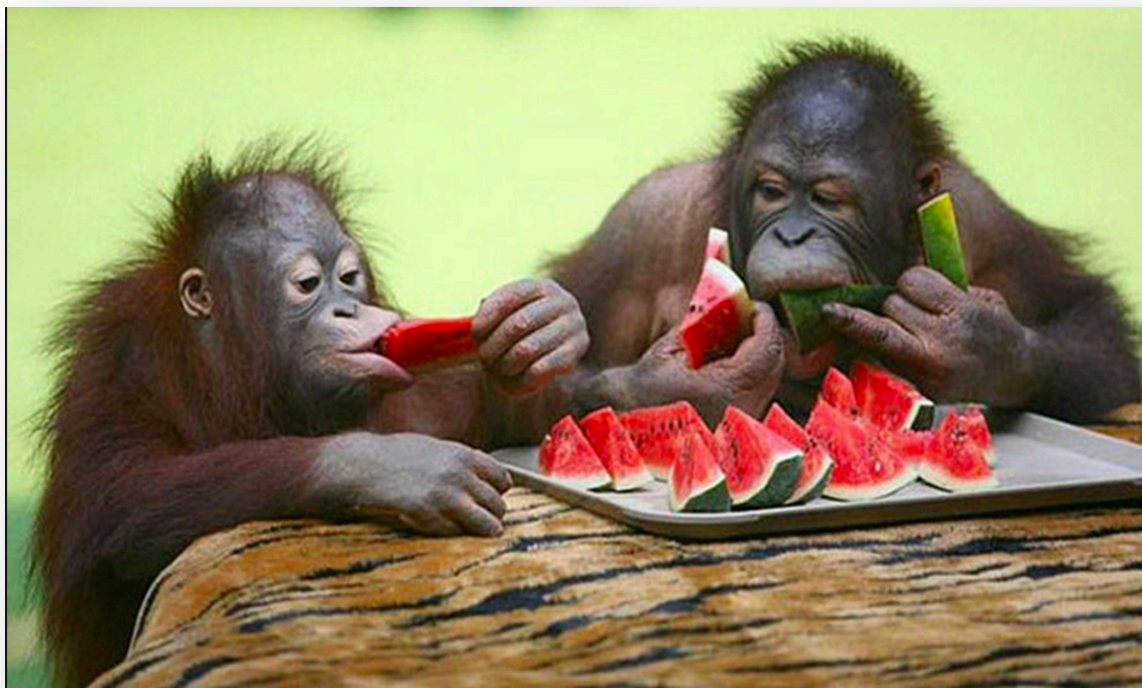
What supports do you need? → Add to list.

5 Major Areas of Planning



Working Lunch Starting at 12:30pm

We will reconvene at 12:30pm. If you are leaving prior to 2:15pm, please let us know and complete an evaluation.



Optional Tools

Developing a State Action Plan

Dana Center
Mathematics
PATHWAYS

Purpose

- Assist chairs and facilitators plan for creating a state action plan for enacting the task force recommendations.
- Address critical issues such as:
 - Creating a plan to enact each recommendation.
 - Creating a communications and engagement plan that engages people and institutions across the state and builds support and a sense of urgency for the recommendations.
 - Defining the on-going role of the Mathematics Pathways to Completion math task force for phase two.

Overview

A State Action Plan is the blueprint for enacting the recommendations. It includes a timeline, milestones, and key activities. It might also identify resources that will be needed in order to enact the plan. The math task force has to transition from a process of developing state level recommendations to planning for enactment at the local level.

The Dana Center recommends establishing small working groups of 3 – 5 people to draft different components of the State Action Plan. In some cases, enactment of a recommendation might be very straightforward while in others enactment might take careful strategic planning.

Consider the following examples.

Situation 1: A Task Force has recommended that a statewide transfer agreement be amended. There is a clearly defined process to follow that should be able to be accomplished in a relatively short time.

Situation 2: A Task Force has recommended that all colleges in the state offer at least two mathematics pathways (algebraic intensive and non- algebraic intensive) for students at the developmental and gateway levels. There is a need to create a plan for how this work can be supported throughout the state on a 3-year timeline.

In Situation 1, a working group might actually enact the recommendation. In Situation 2, the working group would create a plan for the enactment over time. In this case, the working group might continue to oversee this work over time.

The structure of using working groups versus the full task force has several advantages:

- Small groups are better suited to detailed work and can often accomplish tasks more quickly.
- The working groups can include representatives of special interest groups who are impacted by a particular recommendation.
- Breaking the State Action Plan into small components provides an opportunity to broaden engagement and include more people in the process.

10/2016

Transitioning to Action Planning: Graphic

Goal: Develop a State Action Plan with the timeline, milestones, and key activities that will lead to the enactment of the math task force recommendations.

Math Task Force Creates Recommendations

Working Group Activity		Task Force Activity
Establish Working Groups to Enact Task Force Recommendations	Establish Working Group for Communications & Engagement (CEP)	Define New Task Force Role
<p>Step 1: Task Force establishes working groups to plan and enact recommendations.</p> <p>Step 2: Working group chairs recruit and prep members.</p> <p>Step 3: Working groups prepare and submit state action plan and written summary to task force.</p>	<p>Step 1: Task Force establishes a working group that plans external communications about math pathways among and within state level stakeholder groups.</p> <p>Step 2: Working group chairs recruit and prep members.</p> <p>Step 3: Align state recommendation working group's communication and engagement suggestions to a central CEP plan.</p> <p>Step 4: Information about state level recommendations and on-going work for state action plan is disseminated.</p>	<p>Step 1: Task Force creates plan for on-going role and oversight.</p> <p>Step 2: Task Force reviews working groups' state action plans and progress on communications & engagement plan.</p>

Once draft action and communication and engagement plans are received from each working group, the Task Force will complete the following activities:

Draft State Action Plan

Review and Vet the Plan for Feedback

Finalize State Action Plan for Enacting Recommendations

Optional Tools

Developing a State Action Plan to Enact Recommendations		
<p>Suggestions for Use:</p> <ul style="list-style-type: none"> Working groups can use this template as a common planning and reporting tool. The math task force or some subgroup should synthesize the separate working group plans into a cohesive plan to ensure that interrelated work is appropriately aligned. Modify this template as needed to fit your process. See the sheet "Sample State Action Plan" for an example of how the template can be used. 		
<p>Working Group Charge, Timeline, & Deliverable</p> <p>Enter recommendation from state task force report below.</p>		
Timeline of Activity:		
Deliverable:		
Working Group Title:		
Working Group Chair:		
Working Group Members:		
<p>Recommendation(s)</p> <p>Enter recommendation from state task force report below.</p>		
<p>Goal Setting</p> <p>We recommend setting a long-term goal that captures the vision of what enactment of the recommendation will look like. This may have already been done in the recommendation itself or in the Plan for Scaling. If not, draft a goal now. The goal should be measurable. We suggest a 3- to 5-year timeline.</p>		
<p>General Strategy for Enactment of the Recommendation(s)</p> <p>Write a general description that summarizes the strategy for enactment.</p>		
<p style="text-align: center;">Timeline</p> <p>Create a timeline with milestones, activities, and resources that will be needed. A milestone is a key achievement that contributes to accomplishing the overall goal. Each milestone may require multiple activities.</p>		
Milestone:		
Leads for Milestone:		
Deadline:	Activity	Resources Needed
Milestone:		
Leads for Milestone:		

Optional Tools

Appendix C: SAMPLE State Action Plan to Enact Recommendations		
Suggestions for Use:		
<ul style="list-style-type: none"> * Working groups can use this template as a common planning and reporting tool. * The math task force or steering committee should synthesize the separate working group plans into a cohesive plan to ensure that interrelated work is appropriately aligned. * Modify this template as needed to fit your process. See the sheet "Sample State Action Plan" for an example of how the template can be used. 		
Working Group Charge, Timeline, & Deliverable		
Enter recommendation from state task force report below.		
The Math Pathways Working Group will create a plan for implementing Task Force Recommendation 2 that every college offer at least two math pathways based on existing courses in the state transfer module (statistics, math for liberal arts, or college algebra).		
See the full Task Force report for details.		
The Math Pathways Working Group will focus on work with math departments to develop courses and define alignment. The group will collaborate with the Advising Working Group and the Communication and Engagement Working Group.		
Timeline of Activity:	Working group action plan template due February 1, 2017	
Deliverable:	Submit Rec 2 working group action plan template to Task Force	
Working Group Title:	Math Pathways Working Group	
Working Group Chair:	Melissa Reynolds	
Working Group Members:	Steve Phillips, Lisa Merino, Jessica Lotz, Shelby Richardson	
Recommendation(s)		
Enter recommendation from state task force report below.		
Every college and university will offer at least 2 math pathways to students at both the developmental (if applicable) and gateway level and have a viable plan for ensuring that students go into the appropriate pathway based on their program of study.		
Goal Setting		
We recommend setting a long-term goal that captures the vision of what enactment of the recommendation will look like. This may have already been done in the recommendation itself or in the Plan for Scaling. If not, draft a goal now. The goal should be measurable. We suggest a 3- to 5-year timeline.		
By Fall 2018, every college and university in the state will offer at least 2 math pathways with clear recommendation for which pathway is most appropriate for which students.		
General Strategy for Enactment of the Recommendation(s)		
Write a general description that summarizes the strategy for enactment.		
We hope to identify 10 early adopters who will implement math pathways in Fall 2016 with the additional 15 colleges following the next year. We will also set metrics for assessing depth of implementation at institutions.		
Disseminate information statewide. Build from existing model program and find local leaders who will help others implement. Hold a few key events to support implementation.		
Create a website with information and resources.		
Timeline		
Create a timeline with milestones, activities, and resources that will be needed. A milestone is a key achievement that contributes to accomplishing the overall goal. Each milestone may require multiple activities.		
Milestone:	Statewide dissemination of information to math faculty and administrators in collaboration with Communications and Engagement (C&E) working group. C&E will focus on development of materials and written documents. Our group will help identify venues and opportunities and deliver	
Leads for Milestone:	Steve and Lisa	
Deadline:	Activity	Resources Needed
8/15/15	Work with C&E working group to develop a standardized presentation and written information to be disseminated at events.	
8/15/15	Create a list of all professional associations, publications/online venues, events likely to include math faculty and administrators	
	presentations/publications/meet with and engage leadership of	

Formalize your Timeline

Before formalizing your timeline – **is anything missing?**

At-A-Glance Timeline

Dana Center
Mathematics
PATHWAYS

What's Missing?

Before shifting to the At-A-Glance Timeline, reflect back to your poster timeline and the required activities below – **is anything missing?**

Deliverables on Timeline	✓	Activity
Scaling Part I		<ul style="list-style-type: none">• Publish task force recommendations
		<ul style="list-style-type: none">• Submit Plan for Scaling, Part I: Goals
Scaling Part II		<ul style="list-style-type: none">• Submit Plan for Scaling, Part II: Institutional Commitment
Scaling Part III		<ul style="list-style-type: none">• Submit Plan for Scaling, Part III: Strategy and Objectives
		<ul style="list-style-type: none">• Schedule Designing Math Pathways Workshop
Scaling		<ul style="list-style-type: none">• Plan for institutional recruitment
Scaling		<ul style="list-style-type: none">• Submit Institutional commitments documentation (e.g., MOU, letter of commitment, plan, etc.)

Finalize your poster timeline before moving on.

Formalize Your Timeline

Open “At-A-Glance Timeline for Phase 2.”

[illegible]

Formalize Your Timeline

Open “At-A-Glance Timeline for Phase 2.”

A		B		C		D	E
				Timeline			
Domain (drop down menu)	Activity/Deliverable or Objective	Notes on Dana Center Requirements		Deadline	Task Force Notes		
Recommendations	Publish report on recommendations	Submit to Dana Center and consultant for feedback prior to publishing					
Scaling	Plan for Scaling Part I: Goals	Submit to Dana Center and consultant for review and feedback					
Scaling	Plan for Scaling Part II: Institutional Commitment	Submit to Dana Center and consultant for review and feedback					
Activity/Deliverable or Objective		Submit to Dana Center and consultant for review and feedback					
		Submit to Dana Center and consultant for review and feedback					
Publish report on recommendations		Schedule at least 4 months in advance Submit documentation of commitment (MOU, letter of commitment, plan, etc.)		9/30/17			
Plan for Scaling Part I: Goals							
Plan for Scaling Part II: Institutional Commitment							
Plan for Scaling Part III: Strategy and Objectives							
Plan for institutional recruitment							
Schedule Designing Math Pathways Workshop							
Institutional Commitments							

Formalize Your Timeline

Open “At-A-Glance Timeline for Phase 2.”

[illegible]

Formalize Your Timeline

After finalizing your poster timeline, **input** and **refine** this information into the “At-A-Glance Timeline.”

Upload your timeline to your UTBox folder “Fall 2016 Leadership Academy.”



Fall 2016 Leadership Academy

Updated today by Heather Ortiz  2

Wrap-up and Evaluation
