



Continuous Improvement Through Networked Improvement Communities: Aim Statements, Drivers, Measures, and PDSA Cycles Annotated Agenda for Facilitators

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This report is available on the Regional Educational Laboratory Midwest website at <https://ies.ed.gov/ncee/edlabs/regions/midwest>.

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Aims, Drivers, Outcome Measures, and Implementation: The Plan-Do-Study-Act Cycle

Annotated Agenda (for Facilitators)

Time	Session	Session Slides
30 min	<p>Setup</p> <p>Facilitators will ensure that the room is set up, PowerPoint presentation is displayed, and handouts are available.</p>	
10 min	<p>Welcome and Introductions</p> <ol style="list-style-type: none"> 1. Set the stage for the work. 2. Provide general recap of the prior sessions and work to date. 3. Offer introductions. 4. Preview objectives for the session: <ol style="list-style-type: none"> a. Learning objective 1: Provide overview and examples of aim statements and how they fit in the networked improvement community (NIC) process. b. Learning objective 2: Provide overview and examples of primary and secondary drivers and how they fit in the NIC process. c. Learning objective 3: Connect aim statements and drivers to work toward a measurable change idea. d. Learning objective 4: Provide overview and practice executing Plan-Do-Study-Act (PDSA) cycles. e. Learning objective 5: Explore key considerations for implementing NICs. 	Slides 1–10
10 min	<p>Progress So Far Quiz</p> <p>Facilitators will review the topics discussed and the previous module. To tap prior knowledge on specific content from those sessions, facilitators will lead the group through a brief quiz covering aspects of root cause analysis and the theory of action.</p> <p>Participants will raise their hands to answer; the table that answers each question fastest will receive a small round of applause from the group.</p>	Slides 11–16
15 min	<p>What Is an Aim Statement?</p> <ol style="list-style-type: none"> 1. Introduce the concept of aim statements within continuous improvement efforts, addressing the following questions: <ol style="list-style-type: none"> a. What is an aim statement? b. What are the key components of an aim statement? c. What do good aim statements look like? d. How does the aim statement fit into the work we've done so far? 2. Provide aim statement examples and explain how the overarching aim feeds into aim statements at subsequent level. 	Slides 17–18
25 min	<p>Activity: Develop Aim Statements</p> <ol style="list-style-type: none"> 1. Participants will review their homework from the Theory of Action session. Use the inputs table and IF/THEN statements they drafted to develop three aim statements related to their rubric. Participants will write their three aim statements on a piece of chart paper. 	Slides 19–20

Time	Session	Session Slides
25 min	<p>Debrief Aim Statement Activity</p> <p>Facilitators will lead a debrief of the aim statement activity. Tables will be asked to share their chart paper with their aim statements and reflect on challenges and other impressions of the experience.</p> <p>Facilitators will ask each group to read aloud its aim statement from the prior meeting.</p> <ol style="list-style-type: none"> 1. As each group takes a turn reading aloud one aim statement, other groups will listen for the key characteristics of aim statements. 2. Facilitators will call on other groups at random and ask them to identify a key characteristic of the aim that was just shared: <ul style="list-style-type: none"> • The target population • A metric • The change in a numerical value on the metric • The time frame in which the change will occur <p>The activity will be repeated until all groups have shared.</p>	Slides 21–22
15 min	<p>Introduce Drivers and Change Ideas</p> <p>Facilitators will deliver content on drivers and how drivers emerge from aim statements. The group will engage in a discussion around the following topics:</p> <ul style="list-style-type: none"> • Constructing driver diagrams • The difference between primary and secondary drivers • How to generate change ideas that reflect the driver diagram 	Slides 23–24
25 min	<p>Activity: Develop a Driver Diagram</p> <p>Participants will select one aim statement that they developed. Using that aim statement, they will complete the following activity:</p> <ol style="list-style-type: none"> 1. Select one aim statement developed earlier in the session and brainstorm strategies. 2. Using the template, develop a driver diagram that addresses the aim. <i>Facilitator note: This template is on slides 26–27; a copy of this diagram will be posted.</i> <p>Based on the drivers, select the highest leverage driver and develop one change idea that could solve the problem related to your area of focus.</p>	Slides 25–31
15 min	<p>Driver Diagram Presentations</p> <p>Participants will work in table groups and present their driver diagrams and change ideas to the whole group. In their presentations, they will present the following information:</p> <ul style="list-style-type: none"> • The rationale for selecting the driver • The inputs necessary for the change idea • The hypothesis for how the change idea will work and what outcomes are predicted <p>Following each presentation, facilitators and participants will ask questions and provide feedback.</p>	Slide 32

Time	Session	Session Slides
5 min	<p>What's Next for Today?</p> <p>Facilitators will explain that the group will break. After the break, the group will cover outcome measures and practice designing a plan to identify and collect appropriate evidence for a change idea.</p>	Slide 33
10 min	BREAK	Slide 33
20 min	<p>Introduce Outcome Measures</p> <p>Facilitators will introduce the role of determining appropriate measures in planning the work of an NIC. They will present the following guiding questions as important considerations in identifying evidence and planning for collection:</p> <ul style="list-style-type: none"> • What data will you need to study whether this change idea worked? • What metrics do you already collect that can be used to track inputs, outputs, and outcomes in the theory of action? • What metrics would you like to collect to track inputs, outputs, and outcomes in the theory of action? • What would characterize success? <p>Facilitators will lead an open discussion with participants about what data are relevant and available to them. They will also discuss the best strategies for ensuring that target data are easily accessible to practitioners who will need to collect data.</p>	Slides 34–36
55 min	<p>Outcome Measure Planning Activity</p> <p>Facilitators will guide participants in an activity to develop a hypothetical evidence identification and collection plan based on prior work identifying drivers and a change idea. Specifically, participants will work in their groups to do the following:</p> <ol style="list-style-type: none"> 1. Reflect on your change idea from the earlier activity. 2. Brainstorm what information you'll need to see to determine whether the idea created the change you expect through the identified drivers. 3. Based on that brainstorming, complete the evidence planning template on Google Drive. <i>Facilitator note: This template is on slide 38; a copy of this diagram will be posted</i> <p>Following completion of the template, each individual group will share and discuss as a large group:</p> <ul style="list-style-type: none"> • Types of evidence identified • Plans and anticipated challenges around collection of evidence • Obvious and more subtle connections between target evidence and change ideas 	Slides 37–38
15 min	<p>Plan-Do-Study-Act Cycles</p> <p>Facilitators will provide an overview of the steps of PDSA cycles, including how the NIC strategies and components they've studied throughout the prior sessions connect to each step.</p>	Slides 39–47

Time	Session	Session Slides
30 min	<p>Activity: Plan-Do-Study-Act Cycle Practice</p> <p>Facilitators will facilitate participants in a simulated PDSA cycle. The simulation will focus on a hypothetical unmanageable e-mail inbox.</p> <ol style="list-style-type: none"> 1. Participants will work in small groups and review the inputs for the activity: problem statement, aims and drivers, and change idea. 2. Groups will work together to apply the change idea using the test template for guidance. 3. Groups will collect data by marking results in the data collection sheet. 4. Groups will then “act” and make a decision on next steps for the change idea based on the data. 5. As a large group, participants will reflect on the process and share lessons learned. 	Slides 48–56
20 min	<p>Key Questions for PDSA Cycles</p> <p>Facilitators will ask participant groups to reflect on the experience of the activity and apply what they learned to their own contexts. In groups, participants will discuss the following and then share with the large group:</p> <ul style="list-style-type: none"> • What are some potential interventions for our focus area? • Who needs to be involved in planning? Who will be key to execute plans? • What are the specific roles of those involved? • How will the group/team interact, meet, and share information? • What key resources are needed? 	Slides 57–59
10 min	<p>Implementation Planning</p> <p>Facilitators will discuss key considerations for implementing an NIC. They will present the following guiding questions as important considerations, and ask participants to discuss responses based on their experiences implementing other, similar types of initiatives:</p> <ul style="list-style-type: none"> • What makes an implementation successful? • How will you determine success? • What data will demonstrate success? • Who needs to support implementation? • What challenges do you anticipate? 	Slides 60–62
30 min	<p>Activity: Plan for Implementation</p> <p>Facilitators will guide participants in an activity to conduct a SWOT in which they reflect on strengths, weaknesses, opportunities, and threats related to planning and implementing an NIC. Participants will work in small groups to complete the analysis template and then share results with the large group. In this discussion, participants will identify common themes, unexpected ideas, and opportunities for collaboration.</p>	Slides 63–64
5 min	<p>Closing</p> <p>Facilitators will recap the learning for the day, thank participants, and make any relevant announcements about future support and/or plans for NICs in their organization/agency.</p>	Slide 65

References

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- Knowlton, L. W., & Phillips, C. C. (2012). *The logic model guidebook: Better strategies for great results* (2nd ed.). Thousand Oaks, CA: SAGE.
- Proger, A. R., Bhatt, M. P., Cirks, V., & Gurke, D. (2017). *Establishing and sustaining networked improvement communities: Lessons from Michigan and Minnesota* (REL 2017–264).
- Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Midwest. Retrieved from https://ies.ed.gov/ncee/edlabs/regions/midwest/pdf/REL_2017264.pdf

Appendix A. Sample Agenda (One-Day Meeting)

Agenda

Agenda Item	Timeframe	Activities	Slides	Materials
Welcome and Introductions	10 minutes	Participant introductions Quiz on progress so far	1–16	Agenda REL Midwest Summary Handout
Aim Statement Overview	50 minutes	Activity 1: Develop and share aim statements	17–22	Pens/Markers Chart Paper
Drivers and Change Ideas	60 minutes	Activity 2: Develop a driver diagram	23–32	Driver Diagram Handout
Break	10 minutes		33	
Outcome Measures	80 minutes	Activity 3: Outcome measure planning	34–38	Evidence Planning Handout
Break	10 minutes			
Plan-Do-Study-Act Cycles	90 minutes	Activity 4: Conduct a SWOT analysis	360–65	SWOT Analysis Handout
Next Steps and Adjourn	15 minutes		66	



REL Midwest Conducts Its Work Through Collaborative Research Partnerships With Stakeholders

Regional Educational Laboratory (REL) Midwest is part of a network of 10 regional educational laboratories funded by the U.S. Department of Education's Institute of Education Sciences (IES). The RELs work in partnership with school districts, state education agencies, and others to conduct applied research that seeks to solve practical problems and advances fundamental understandings of education challenges and processes. The RELs also share up-to-date research evidence and engage with researchers, practitioners, and policymakers in understanding that evidence. In addition, the RELs provide technical assistance related to the application and use of data and scientifically valid research.

REL Midwest conducts its work through collaborative research partnerships with stakeholders in **Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin**. To address the priorities and interests of these states, REL Midwest supports four research alliances and a networked improvement community (NIC), as well as emergent partnerships. The work of these partnerships is developed in consultation with state education agency (SEA) and district staff to address priority education issues in the region.

Although the four research alliances and the NIC have a main state partner, SEA staff working on similar issues in the region have the opportunity to participate in a community of practice to share best practices and explore research findings. The emergent partnerships operate over a shorter period of time and have the objective to respond to SEA and local education agency requests for immediate assistance.



REL Midwest’s collaborative research partnerships include the following:

- **Midwest Achievement Gap Research Alliance:** This alliance will support efforts in Wisconsin to close the Black-White achievement gap. The alliance will support the development of initiatives to improve cultural competency, track implementation of those initiatives, and develop metrics to track expected changes such as cultural assumptions, beliefs, behaviors, and instructional strategies.
- **Midwest Alliance to Improve Teacher Preparation:** This alliance will explore teacher preparation models, examine relationships between existing models and teacher and student outcomes, and examine the implementation of changes in Michigan Department of Education policy.
- **Midwest Career Readiness Research Alliance:** This alliance will investigate the career readiness and pathways of high school students in three high-poverty rural districts in Minnesota with a high percentage of Native American students.
- **Midwest Early Childhood Education Research Alliance:** This alliance will examine the characteristics of early childhood education programming and participation in Illinois and the relationship between programming and school readiness at kindergarten entry and student outcomes in early grades.
- **Iowa Learning and Technology Networked Improvement Community (NIC):** This NIC will bring together rural districts in Iowa to engage in continuous improvement research activities to identify effective ways of integrating technology into instructional practice.
- **Emergent Research Partnerships:** Emergent partnerships also will be developed with the objective of responding to state and local education agency requests for immediate assistance.

REL Midwest offers the following types of supports to the collaborative research partnerships and stakeholders in the Midwest region.

 <p>Applied research studies that address partnerships’ research questions</p>	 <p>Technical support such as survey, interview or observation protocol development, literature reviews, or tool development</p>
 <p>Events that support the dissemination and understanding of existing research</p>	 <p>Reviews of studies and interventions to determine level of evidence to support ESSA implementation</p>
 <p>Workshops that support the use of data and research</p>	 <p>Ask-A-REL annotated bibliographies produced in response to stakeholder questions</p>
 <p>Coaching that supports the use of data and research</p>	

 If you would like to discuss a state-specific issue with a REL Midwest staff member, contact REL Midwest Director Julie Kochanek jkochanek@air.org or REL Midwest Deputy Director Chad Duhon cduhon@air.org.

 To find out more about REL Midwest, visit <https://ies.ed.gov/ncee/edlabs/regions/midwest/index.asp>.

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