Pilot Development Companion Guide

The goal of this companion guide is to support the Innovation Team Leader(s) as they embrace the innovation learning and pilot development work that is addressed in this asynchronous module series. As outlined in the Innovation Journey RoadMap, team leader(s) lead the innovation team in your district. These leaders are required to participate in one of the various versions of the Innovative Mindset and Pilot Development (IMPD) course—with this asynchronous online version being one of them.

The following activities align to the content of the Module Series 4 slides. Please provide the requested information in the activity space for the indicated slide(s). Font size will adjust automatically to allow for printing within the allowable space.

Module 4: Defining Outcomes and Identifying Measures to Assess Outcomes

» C	onnection	>>	Principles and Routines
» Co	onstant Learning	>>	Problem-Solving and Design Thinking
» Ci	reativity	>>	Reflection
» Fl	lexible Learning Environments	>>	Safe and Supportive Risk Taking
» G	oal Setting	>>	Variation
» 0	pen-Ended Questions		
» 0	pportunities for Revision		(Lynch, 2018; Shulman, 2018)

Slide 11: A culture of innovation in education is characterized by key attributes that not only are embraced and nurtured by staff, educators, and leadership across a school or district but also support the implementation of innovative approaches. The following Slide 11 Activity Spaces will help you identify which characteristics of a culture of innovation and innovative learning environments are targeted by your innovation, and how you plan to assess whether those characteristics are in place.

Slide 11 Activity Space: Culture of Innovation

For each of the following characteristics of a culture of innovation, identify the degree to which this characteristic is already in place in your school or district and identify how your plan will build on these aspects of an innovative culture through the structure of your innovation.

Characteristic	Degree of Implementation (e.g., not in place, somewhat in place, fully in place)	How will your innovation develop or build on this aspect of a culture of innovation?
An environment in which educators, leaders, and learners are encouraged to take risks and know that failure is not penalized		
A culture that encourages investigation, creativity, and iterating on ideas, products, and approaches		
An environment where the type of learning and teaching being envisioned aligns the approaches to assessing and measuring success		
Makes various types and formats of professional learning available to empower educators and leaders to be creative and do their best work		

Characteristic	Degree of Implementation (e.g., not in place, somewhat in place, fully in place)	How will your innovation develop or build on this aspect of a culture of innovation?
Recognizes areas of innovation within the school and district and builds the capacity for others to adopt and adapt these the innovations		
Values all members of the educational community, whose collaboration is prioritized and rewarded		
Has a mission to enhance equity and equality for all members of the educational community and engages in innovative practices to ensure access to high- quality learning and teaching opportunities and equality of learning outcomes and experiences		
Is responsive to the needs of individual students, the broader community, and the workforce		



Slide 11 Activity Space: Innovative Learning Environments

The following are characteristics of an innovative learning environment. In the chart on the next page, identify at least three that will be targeted by your innovation and how you plan to measure whether each is in place or influenced by your innovation.

- **Connection:** Educators know their students well and establish deep connections. Students connect with their teachers, their peers, and the world around them.
- **Constant Learning:** The learning and teaching are fast paced with lots of teachable moments.
- Creativity: Educators support out-of-the-box thinking and creative problem-solving.
- Flexible Learning Environments: Classroom spaces accommodate different types of learning activities (e.g., independent learning, small group and paired activities, one-on-one learning, collaboration).
- Goal Setting: Learners are a part of the goal-setting process for their learning.
- **Open-Ended Questions:** Teachers encourage a variety of answers, strategies, and points of view.
- **Opportunities for Revision:** Students and teachers engage in ongoing change, adaptation, revision, and improvement.
- **Principles and Routines:** Educators establish environments with consistency and provide guidelines for how the classroom is conducted.
- **Problem-Finding and Design Thinking**: Educators and students inquire and seek out problems to be solved, and educators encourage asking why and how. Educators identify challenges, gather ideas, generate possible solutions, refine ideas, and test solutions.
- **Reflection:** Educators and learners engage in ongoing self-reflection and inquiry.
- Safe and Supportive Risk-Taking: Educators support productive struggle and establish safety to make mistakes and use them as learning opportunities.
- Variation: Educators use a variety of strategies and techniques to engage learners. Students are comfortable with their own styles of learning and personalities.

Characteristic	Plans for Measurement

Slide 11 Activity Space: Innovative Learning Environments (continued)





Slide 12: In previous modules, you took the time to identify what success will look like and feel like for different stakeholders involved in the innovation. Take some time now in the Slide 12 Activity Space to identify *how* you will know that your innovation is having the desired results.

Slide 12 Activity Space

Respond to the following questions about measuring your innovation.

1. How will you know whether, and how much, practices are changing within classrooms, schools, and districts in the areas you targeted?

2. How will you determine whether educators are developing and using new pedagogical strategies aligned to the attributes of innovative learning environments?

Slide 12 Activity Space (continued)

3. How will you measure whether attitudes, beliefs, and mindsets are changing?

4. How will you measure changes in outcomes for students?

5. How will you know whether the innovation has increased access and equity within your educational community?



_	Task review to determine if tasks are open and	Three numbers add up to 100. One number is 27.
	can be solved in a variety of ways.	What are two other numbers that when added to 27 have a sum equal to 100?
>	Observation protocol includes examples of what	Sample Solutions: 27 + 3 + 70 = 100
	teachers are doing and what students are doing.	27 + 43 + 30 = 100
	 Teacher asking questions to understand but not take over or funnel thinking. 	100 - 30 = 70, so 100 - 27 = 73. So, 27 + 70 + 3 = 100.
	 Students asked to explain, clarify, and elaborate on their mathematical thinking. 	The task has multiple solutions, and different strategies can be applied to solve the problem.

Slide 17: Identifying the outcomes, indicators, and measures for your innovation are important. The *outcome* is the desired impact your innovation will have on student academic performance, culture, mindset, policy, and more. The *indicators* are signs you can observe that show you are achieving those outcomes. Finally, *measures* are the tools, rubrics, and assessments you can use to identify whether the outcomes were achieved and to what degree.

Slide 17 Activity Space

Identify the outcomes, indicators, and measures for your innovation.

Outcome	Indicators	Measures

Outcome	Indicators	Measures



Post-Module

Use your responses to the activities in this companion guide to respond to the reflection questions required in EnGINE for the full module series.

For your innovation:

1. Who will be impacted by this change?

2. How will you know they are impacted?

3. What measures of student educational growth will you use to gauge success?

4. What measures of student engagement will you use to gauge impact?



References

- Blazer, C. (2011). How students' beliefs about their intelligence influence their academic performance. *Information Capsule* (Research Services, Miami–Dade County Public Schools), *1012*, 1–6.
- Bocala, C., Henry, S. F., Mundry, S., & Morgan, C. (2014). *Practitioner data use in schools: Workshop toolkit* (REL 2015–043). U.S.
 Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast & Islands. <u>http://ies.ed.gov/ncee/edlabs</u>
- Dyer, K. (2019, June 25). *Making sense of growth mindset and growth measures* [Blog post]. <u>https://www.nwea.org/blog/2019/making-sense-of-growth-mindset-and-growth-measures/</u>
- Kekahio, W., & Baker, M. (2013). Five steps for structuring data-informed conversations and action in education (REL 2013–001). U.S.
 Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Pacific. <u>https://files.eric.ed.gov/fulltext/ED544201.pdf</u>
- Lynch, M. (2018, July 16). 10 characteristics of an innovative classroom. *Education Week*. https://www.edweek.org/education/opinion-10-characteristics-of-an-innovative-classroom/2018/07
- National Forum on Education Statistics. (2012). *Forum guide to taking action with education data*. (NFES 2013-801). U.S. Department of Education, National Center for Education Statistics.
- OECD. (2016). Innovating education and educating for innovation: The power of digital technologies and skills. http://dx.doi.org/10.1787/9789264265097-en
- Pasquale, M. (2015). *Productive struggle in mathematics* (Research Brief). Education Development Center. <u>http://docplayer.net/24571711-Edc-productive-struggle-in-mathematics-marian-pasquale.html</u>



Regional Educational Laboratory West. (2019). *Using inquiry cycles in PLCs to improve instruction*. U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. <u>https://ies.ed.gov/ncee/edlabs/regions/west/relwestFiles/pdf/REL-West-4-2-3-4-Literacy-Improvement-Partnership-Inquiry-</u> Cycles-Infographics-508.pdf

- Shakman, K., Wogan, D., Rodriguez, S., Boyce, J., & Shaver, D. (2020). Continuous improvement in education: A toolkit for schools and districts (REL 2021–014). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast & Islands. <u>https://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=4591</u>
- Shulman, R. (2018, November 19). 10 ways educators can make classrooms more innovative [Blog post]. *Forbes*. <u>https://www.forbes.com/sites/robynshulman/2018/11/19/10-ways-educators-can-make-classrooms-more-innovative/?sh=15b038357f87</u>.

Stanford University. (2018). SPARQtools. <u>https://sparqtools.org/mobility-measure/growth-mindset-scale/</u>.

Vincent-Lancrin, S., Urgel, J., Kar, S., & Jacotin, G. (2019), *Measuring innovation in education 2019: What has changed in the classroom?* OECD. <u>https://doi.org/10.1787/9789264311671-en</u>



www.air.org

Notice of Trademark: "American Institutes for Research" and "AIR" are registered trademarks. All other brand, product, or company names are trademarks or registered trademarks of their respective owners.

This material is in the public domain. While permission to reprint is not necessary, publication should be cited. The material is prepared by the Region 1 Comprehensive Center under Award #S283B190004 for the Office of Program and Grantee Support Services (PGSS) within the Office of Elementary and Secondary Education (OESE) of the U.S. Department of Education and is administered by the American Institutes for Research[®]. The content of the document does not necessarily reflect the views or policies of the PGSS or OESE or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government. © 2021 American Institutes for Research.