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Accelerating Innovation

A Guide to Leveraging the 2024 Driving K-12 Innovation Report



About CoSN

Vision

CoSN is a community of visionary technology leaders empowering every learner to achieve their unique potential in a changing world.

Mission

CoSN provides current and aspiring K-12 education technology leaders with the community, knowledge, and professional development they need to create and grow engaging learning environments.

CoSN's EdTech Innovation

Committee develops primary resources on the Driving K-12 Topics, and other timely subjects as they arise, that have the potential to significantly impact K-12 education.

CoSN's Driving K-12 Innovation initiative convenes an Advisory Board of international educators, technologists, changemakers, and industry partners to identify key opportunities for innovation in K-12 spaces and enable awareness and action around them.

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Introduction & Objectives

This is a "grab and go" guide for thinking through the <u>Driving K-12 Innovation</u> initiative's Hurdles (barriers), Accelerators (catalysts or megatrends), and Tech Enablers (tools) that are the most important for your school or district, and designing ways to make progress around one or more of them.

More specifically, this protocol will help you:

- Identify the most important Hurdles, Accelerators, and Tech Enablers in your context right now, with stakeholder input.
- Use this information to think through and strategize around possible action(s).
- Have important conversations with stakeholders in your district/organization to implement change.
- Explore the intersections of the Top Topics to assist your team in identifying strategies and an action plan to drive innovation.

This work is meant to be a launchpad vs. documentation with all the answers....to spark conversations.

Framework Overview

This protocol worksheet leverages the publication <u>Driving K-12 Innovation</u>: <u>2024 Hurdles, Accelerators, and Tech Enablers</u> and mirrors, for the most part, the Driving K-12 Innovation process used to collaboratively identify the most important topics for innovation in K-12 each year.



Hurdles

Roadblocks that force schools to slow down, prepare themselves, and make a leap.



Accelerators

Real-world megatrends or catalysts that help motivate and increase the speed of innovation.



Tech Enablers

The tools that grease the wheels for schools to surmount Hurdles and leverage Accelerators



Process

This guide provides a systematic framework for establishing the core focus and objectives of an initiative. By following these steps, you'll gain clarity and alignment, ensuring key stakeholders involved are working toward shared goals.

- 1. Center: Define Your Purpose
- 2. Include: Identify Stakeholders
- 3. Diverge & Converge: Determine Topics for Consideration
- 4. Discuss: Explore & Analyze Each of Your Selected Topics
- 5. Prioritize: Choose the Most Important 1-3 Topics in Each Category
- 6. Strategize: Explore Intersections Between the Most Important Topics
- 7. Communicate: Update Stakeholders on Your Process, Progress & Next Steps



1. Center: Define Your Purpose

First, you need to clarify why you want to engage in this innovation process. Setting a well-defined purpose for your innovation efforts is fundamental. It serves as the cornerstone upon which successful, sustainable change efforts are built. (If you get stuck, consider tying your efforts back to your school/ district's mission, vision, or strategic plan.)

What do you hope to accomplish? For example: Gain a better understanding of what our teachers are really struggling with; prioritize professional development efforts; look for ways to merge efforts informed by this process; implement a system for more effective communication between teachers and parents to support student success.	Why does this matter? To you? To specific stakeholders? For example: Understanding the challenges our teachers face allows us to provide targeted support and resources; too many change efforts are not sustainable – this process could help avoid the "disappearing pilot" phenomenon; strengthening connections within our school community creates a more inclusive and supportive environment.



2. Include: Identify Stakeholders

Stakeholder inclusion is essential to any successful, value-led change effort.

Who are your stakeholders? Who will be impacted by change work in your Not sure? Consider: school/district? Who has influence in this work? Who is leading this effort? Teachers Teaching assistants/Support staff Administrators Students Parents/Guardians EdTech staff Community partners Grants organizations Local employers hiring high school graduates School Board Grandparents and senior citizen groups* • Outside organizations & government departments *Including those in the community without school-aged children helps them to feel connected and see the value of investing in the school through volunteering or supporting tax levies.



What will your process be to include stakeholders? For example, will you reach out to the various stakeholders groups that could be impacted by potential actions taken in order to involve all of them at once? Or would a better strategy be to involve stakeholder groups at different times? Will you hold a virtual or in-person meeting (or meetings)? Conduct a survey? Each situation will most likely call for a different approach(es).



3. Diverge & Converge: Determine Topics for Consideration

While all the topics in the initial list may be important for your organization, it is crucial to triage topics that could have the greatest immediate impact and relevance for action.

Diverge: Cast a Wide Net Review the topic lists (below) from the 2024 Driving K-12 Innovation Advisory Board and create your own list of topics relevant to your school/district. • Hurdles • Accelerators • Tech Enablers	→ Diverge: Seek Input Consider a survey or town hall style meetings to include your identified stakeholders in the process. Ask this question for Hurdles, Accelerators, and Tech Enablers: "Which topics do you see most impacting our school or school system now and in the next five years?"	→ Converge: Analyze stakeholder input and curate a list of at most 12 topics in each category (Hurdles, Accelerators, and Tech Enablers).
What topics are missing from the list? Revise your list (it's okay if it's long).	My plan for gathering stakeholder input:	Which topics do you think are top priority to discuss (in the next step)? Do your stakeholders see something different?



4. Discuss: Explore & Analyze Each of Your Selected Topics

With your shorter (and hopefully more manageable!) list of topics to consider, it's time to dig deeper into each one. How is each appearing (or not) in your school/district? What are the related nuances? What makes it important? What's getting in the way of moving forward?

This discussion and exploration lays the groundwork for identifying the *most* important few topics for your school/district to address right now or in the near future.

How will you discuss these topics?	The Advisory Board discussion for the Driving K-12 Innovation initiative involves a combination of asynchronous forum conversation (using the discussion questions below) and facilitated live video calls.
Which stakeholders will you involve in the discussion?	Who will structure, facilitate, and monitor conversations?



Discussion Prompts

Hurdles: What's the biggest stressor/challenge on your mind today? Additional optional ideas to jump start	Accelerators: What's the biggest trend/catalyst on your mind today? Additional optional ideas to jump start	Tech Enablers: What tool or technology are you grateful for or excited about (or deeply annoyed with) in the work you do? Additional optional ideas to jump start
conversation: How is this Hurdle materializing at your school/district/region? Share concrete examples. (PERSONALIZE) How can we surmount this Hurdle? What would you recommend to others? Consider what is currently working, has promise, or is not working. (STRATEGIZE) How does this Hurdle interact with other Hurdles, Accelerators, or Tech Enablers? (THINK SYSTEMICALLY)	conversation: How is this Accelerator materializing at your school/district/region? Share concrete examples. (PERSONALIZE) How can we leverage this Accelerator? What would you recommend to others? Consider what is currently working, has promise, or is not working. (STRATEGIZE) How does this Accelerator interact with other Accelerators, Hurdles, or Tech Enablers? (THINK SYSTEMICALLY)	conversation: How is this Tech Enabler materializing at your school/district/region? Share concrete examples. (PERSONALIZE) How can we leverage this Tech Enabler? What would you recommend to others? Consider what is currently working, has promise, or is not working. (STRATEGIZE) How does this Tech Enabler interact with other Tech Enablers, Hurdles, or Accelerators? Consider how it can be used to surmount specific Hurdles or take advantage of specific Tech Enablers. (THINK SYSTEMICALLY)



5. Prioritize: Choose the Most Important 1-3 Topics in Each Category

Considering your stakeholders' input and your district's strategic plan and vision, what are the one to three most important topics that your team would like to address? Depending on the size of your stakeholder group, you could send a survey or hold a discussion and shared decision-making time. If applicable, consider a collaborative decision-making approach.

After discussing all the topics, select the three most important Hurdles, Accelerators, and Tech Enablers.

Seek Input to Prioritize

After the discussion phase, consider a survey to capture your colleagues' and stakeholders' input.

Example Survey Questions:

- Please select the three [Hurdles/Accelerators] you believe are the *most important* for schools to address in 2024 in order to pave the way for teaching and learning innovation and extraordinary student outcomes.
- Please select the three Tech Enablers you believe are the *most important* for schools to leverage in 2024 in order to surmount Hurdles and embrace Accelerators.

My plan for gathering stakeholder input:

Our Top Hurdles, Accelerators, and Tech Enablers:

Hurdles

- 1.
- 2
- 3.

Accelerators

- 1
- 2.
- 3.

Tech Enablers

- I.
- 2.
- 3.



6. Strategize: Explore Intersections Between the Most Important Topics

Now that you have your Top Topics, reflect on how each of them may relate to the others. The chart below shows an example of how the Top Topics selected by the 2024 Driving K-12 Innovation Advisory Board intersect.

There's a blank chart further on for your use. As you fill out the chart, consider how pairing related topics could help you. For instance, the Hurdle of Ensuring Cybersecurity and Safety Online could be addressed by using Analytics and Adaptive Technologies.

As you consider possible actions, weigh impact, cost, and complexity of implementation.

Example: Intersections in Driving K-12 Innovation 2024 Report

Recognizing the connections between Hurdles, Accelerators, and Tech Enablers is important to understanding the challenges facing education today. This interconnected view empowers school districts to leverage innovation to propel themselves forward.

There are two resources and an additional example in the subsequent pages.

The first, the sample table on the next page, shows some of the intersections identified in the free 2024 Driving K-12 Innovation report. It also models two ways you can use a table like this: simply mark intersections with an "x" or a checkmark or use the space to brainstorm ideas. A blank version is included on subsequent pages for you to consider intersections in your identified topics.

The second example shows a chart to identify and assess the topics and their intersections. Two blank versions of this chart are included later on.

The third example, in paragraph form, describes a process for leveraging a curriculum + technology mindset in combination with Hurdles, Accelerators, and Tech Enablers to solve concrete challenges.



	[Hurdle] Attracting & Retaining Educators and IT Professionals	[Hurdle] Ensuring Cybersecurity & Safety Online	[Hurdle] Scaling Innovation & Inertia of Education Systems	[Accelerator] Changing Attitudes Toward Demonstrating Learning	[Accelerator] Building the Human Capacity of Leaders	[Accelerator] Learner Agency	[Tech Enabler] Generative Artificial Intelligence	[Tech Enabler] Analytics & Adaptive Technologies	[Tech Enabler] Rich Digital Ecosystem
Attracting & Retaining Educators and IT Professionals					Х			х	
Ensuring Cybersecurity & Safety Online					Х			х	
Scaling Innovation & Inertia of Education Systems				Exploring new ways for students to demonstrate mastery of learning	Creating new opportunities for educators to expand their voice.		New avenues for learning opened up by GenAl that don't look like traditional approaches.	More ways to provide immediate and high-quality feedback to students so that we can personalize learning more.	
Changing Attitudes Toward Demonstrating Learning					Having more leaders who help school systems to move past outdated methods of education and give every child the opportunity to learn.	A reason for new attitudes: the possibilities opened up by enabling learner agency.	How do we move from a system of education that prioritizes mastery on the outcome (formatives, report, etc) instead of the process of learning?		х
Building the Human Capacity of Leaders	Informed, clear and effective leadership is crucial to constructing teams that will both be enthusiastic about engaging with innovation and willing to stick through the difficult times that arise in the course of any project.	Leaders within a school organization need to understand that cybersecurity is everyone's responsibility. It shouldn't just lie with technology as everyone has a role to make sure we're safe.				Approaches to education that emphasize learner agency are implemented at the teacher level - but they have to be understood and championed at the leadership level.			
Learner Agency							х		
Generative Artificial Intelligence									Х
Analytics & Adaptive Technologies							Uses of GenAl to discover trends, patterns not visible via traditional exploration routes.		Х
Rich Digital Ecosystem			х			х			



Example: Evaluation & Strategy

Shared by an Anonymous EdTech Innovation Committee Member

I have started using the report as a supporting resource for talking points within my district and with various state groups.

Challenge	Intersections	Importance	Impact	Urgency
Getting all stakeholders on board with the most important issues so that we start prioritizing and working together to make progress. I see a large number of issues that all need a lot of buy-in to prioritize and solve. I would love it if we could partner with professional organizations for superintendents and governing boards to get everyone on the same page with some of the work that needs to be done. Even collaborative work with various state departments of education would be helpful. It seems that we have a lot of great information and resources. Because of increasing priorities, bringing together leadership and mobilizing the district's stakeholders is a hurdle in the process.	Scaling Innovation Building the Human Capacity of Leaders	This is essential. We need everyone to start working together to get our arrows aligned and progress in the right direction.	High!	Critical
Implementing professional development for the team that contains key knowledge/models for implementing new avenues for learning that are learner agency-oriented, and that are best implemented using the power of new technological toolkits. This includes real understanding and models for implementation of key pedagogical models such as constructivism (Piaget, Vygotsky, Bruner) and constructionism (Papert, Harel) – both are frequently misunderstood and oversimplified, leading to failure in project development.	Changing Attitudes Towards Demonstrating Learning Learner Agency	An essential piece of the puzzle. While it is possible to move forward at the beginning with less learner agency-oriented approaches, you eventually hit a wall in how much progress can be made. Additionally, some "nonagency" approaches do not scale well moving forward, and need to be radically monied or abandoned altogether, leading to frustration among team members who had adopted them initially.	Very High	High



Example: Curriculum + Technology

Shared by Stacy Hawthorne, Chief Academic Officer, Learn 21, Texas, U.S.

Success in teaching and learning depends heavily on the combination of curriculum and technology. Let's face it, technology is curriculum and curriculum is technology, aka curriculum + technology...any challenges and frustrations in education can only be solved with this joint curriculum + technology perspective.

How can we use Accelerators and Tech Enablers to address points of frustration or Hurdles?

In a recent workshop, Jen Fry, Ashley May, and I guided curriculum leaders and edtech professionals in strategizing around challenges that require a curriculum+technology mindset and a bit of creativity to address.

Each group started with a specific, random problem, like incorporating coding into English language arts. The teams were challenged to explore ways to integrate basic coding concepts into the English language arts curriculum to enhance digital literacy. The challenge here is in balancing technical skill development with language arts learning objectives. After a bit of time to discuss, each group was assigned a Tech Enabler or Accelerator and directed to use it in addressing their problem. The results were creative, relevant strategies! They also showed how the Tech Enablers and Accelerators are excellent resources to solve almost any curriculum + technology challenge.

Innovation happens at all levels of an organization and does not depend on a formal "leadership" title. Whether you work primarily in a classroom or an admin office, consider how might this approach (curriculum + tech; Accelerator/Tech Enabler to address a specific problem) may be useful in your work.



Your Turn: Intersections



Your Turn: Strategize (Option 1)

Challenge	Intersections	Importance	Impact	Urgency



Your Turn: Strategize (Option 2)

Top Topic	Urgency	Importance	Impact	Ideas, Strategies & Opportunities



7. Communicate: Update Stakeholders on Your Process, Progress & Next Steps

Communication is key as we integrate the insights from the Driving K-12 Innovation report into our educational practices. Engaging in transparent and consistent communication with all stakeholders ensures that the diverse voices and perspectives within our school community are heard and valued throughout the process. By keeping stakeholders informed of our progress and intentions, we foster a culture of trust, collaboration, and mutual respect.

Remember that listening is often more important than speaking. Effective communication is not merely about disseminating information but about creating meaningful dialogues that inspire action, reflection, and continuous improvement. As we move forward in this process, it's necessary that stakeholders are kept in the loop about possibilities that lie ahead in our shared journey toward driving K-12 innovation.

How will you communicate with your stakeholders?

Not sure? Consider:

- **Email Newsletters:** Regularly scheduled newsletters can keep stakeholders informed of ongoing developments, upcoming events, and summaries of past activities. (probably similar to emails).
- **Webinars/Workshops:** Hosting informational webinars or interactive workshops can provide stakeholders with in-depth knowledge and hands-on experience with the initiatives being implemented. (Probably the same as live events; could also be delivered via a short video series rather than live.)
- Infographics: They can effectively communicate complex information in a digestible and visually appealing format, which is particularly useful for data-heavy messages.)
- **FAQs:** A frequently asked questions document can preemptively address common queries and concerns stakeholders may have.
- **Social Media:** Where are your stakeholders hanging out? Meet them where they are.
- "Private" Online Communities like an online forum for your organization.



What will you share? Consider: • Expressions of Gratitude & Impact: Thank your stakeholders for their involvement in the process and communicate the impact of their time and feedback. Process Updates: What are you working on now that's relevant to the stakeholder's priorities, to your shared values/mission, or to the process they've been a part of? Case Studies: Detailed case studies of successful implementations can serve as motivational tools and guides for stakeholders. Interactive Dashboards: These allow stakeholders to explore data and insights related to the report's impact on their own time and can encourage deeper engagement with the material. Feedback Forms: Besides surveys, dedicated feedback forms can allow stakeholders to provide their input at any time. Training Sessions: Targeted training sessions on specific tools or strategies from the report can empower stakeholders to more effectively implement these in their own contexts.



Case Studies & Examples

Reviewing concrete examples of how districts, schools, and leaders are leading change and leveraging the ideas in the 2024 Driving K-12 Innovation report can fuel inspiration for your change-making work ahead. Some of the following examples explore a process that's similar to the suggested protocol. Other stories will show different approaches. Take these examples as both encouragement and inspiration!

Design Exercise

Shared by Jill Brown & Carla Wade, CoSN

Here's the design thinking exercise we're using at the Large and Small/Rural Districts in our Summit at CoSN2024.

Design Thinking Process Instructions

Part 1: Problem of Practice

Create a statement that clearly identifies a current need.

Part 2: Analyze Root Causes

Discuss and Identify - Share and Organize - Revisit (Parking Lot)

Part 3: Theory of Action

Create an if...then statement that describes how you will tackle your problem of practice and the desired impact.

Part 4: Inputs

<u>Inputs - People</u>

Who are the individuals you need for this project and how will you support them?

<u>Inputs - Resources</u>

What resources do you have or need to make your project a success?

Part 5: Actions - Outputs - Outcomes

What steps will you implement to respond to your theory of action?



CosN Design Thinking Leading Education Innovation		Project T	itle:				
		Project Team:					
Project Topic:							
1. Problem of Practice	2. Analyze Root Causes	3. The	eory of Action	4A. Inputs- People 4B. Inputs - Resources	5. Actions		
Create a problem of practice statement below that clearly identifies a current need.	1. Discuss and Identify. Brainstorm causes of you problem. 2. Share and Organize. Determine the top three causes of the problem. Drill down to the root cause by asking why three times. 3. Revisit and finalize. Revisit your problem statement, redefine it if necessary and come up with your final statement.	Create an ifthen statement that describes how you will tackle your problem of practice and the desired impact. Example: If we increase the professional development on cybersecurity, then we will reduce the risk of successful attacks.		describes how you will tackle your problem of practice and the desired impact. Example: If we increase the professional development on cybersecurity, then we will reduce the		4A. People Who are the individuals you need for this project and how will you support them?	What steps will you implement to respond to your theory of action? Who is the owner of each of these actions? Who will be impacted?
	Cause 1: - Why 1: - Why 2: - Why 3: - Why 3: - Why 4: - Why 5: Cause 2: - Why 1: - Why 2: - Why 2: - Why 3: - Why 4: - Why 5:			4B. Resources What resources do you have or need to make your project a success?			
	Parking Lot:			Parking Lot:			
Success Criteria			Progress Monitoring Plan				
How will we know if we are successful?			How will you measure progress on your theory of action and what time periods are reasonable to expect results? Short term: (days/months)				
How will we measure success?			Medium term: (days/months)				
What are you going to be monitoring along the way?			Long Term: (days/months)				



Analytic & Adaptive Technology, Professional Development & Generative Artificial Intelligence

Shared by Katie Harmon, Director of Educational Technology, Westhill CSD, New York

Our district utilizes analytical and adaptive technologies and professional development around generative AI in education to start a transformative shift in attitudes towards students demonstrating learning. The district's purchase of Panorama Education's data dashboards and the adaptive features of iReady empowers teachers and teams to make well-informed decisions regarding educational programs for students. This initiates a critical reevaluation of how learning standards are addressed and how student assessment is conducted.

Furthermore, we are implementing "Grading for Equity" book studies as a low-tech resource to foster a deeper understanding of equitable grading practices with a focus on standards-based grading. Additionally, during professional development sessions focused on the integration of AI in education, educators are guided in reflecting upon the structure of learning and assessment within their classrooms, with the aim of ensuring greater alignment with the evolving demands of the external world.

These initiatives collectively contribute to the forward-thinking ideas for assessing student understanding, diverging from conventional approaches and laying the foundation for continuous improvement in educational practices.



Al in Education Statewide Steering Committee for Colorado

Shared by Dave Jarboe, Director of Instructional Technology & STEAM/CTE, D2 Harrison Schools, Colorado, U.S.

I have the privilege of working with colleagues across Colorado on a project sponsored by the <u>Colorado Education Initiative</u>. The goal of the project is to identify urgent policy and practice priorities and pathways to create conditions that foster promising solutions for Al in education in Colorado.

My role in the project is leading a working group tasked with examining *Improving the Role of Teachers with AI*. This falls perfectly within the Driving K-12 Innovation intersection of Hurdle: Attracting & Retaining Educators and Tech Enabler: Generative Artificial Intelligence. We are exploring the opportunity that AI can provide and help teachers streamline and reduce the workload in a positive, tangible way to support retention and recruitment. We recognize how AI has the power to help teachers design lessons, courses, and assessments; analyze data of student's performance and learning interventions; and reduce the time necessary to do the administrative requirements.

We are in the process of listing the key roles of the teacher and identifying where AI can be leveraged as an effective strategy and areas where AI might not be capable or effective. We are considering the stages of the <u>SAMR</u> model as applied to each tool or practice. In addition, we are balancing the Risk/Reward of implementation of these strategies in order to guide our recommendations.



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