

Building an Adaptive Implementation Process in Education

Ryoko Yamaguchi

EIR Conference, December 2017

Educational Improvement through Research

Today's Presentation

- Congratulations!
- Introduction to Adaptive Implementation
 - Why Adaptive Implementation?
 - What is Adaptive Implementation?
 - Five steps
 - Al team
 - Design and Action Plan (DAP)
- Let's Give It a Try!
 - Create your own Design and Action Plan

Wearing Multiple Hats in Education

Multiple Roles in Education

- Special education teacher (BD/ LD)
- Social science researcher
- Methodologist
- Evaluator
- Program developer
- Parent advocate
- Parent volunteer

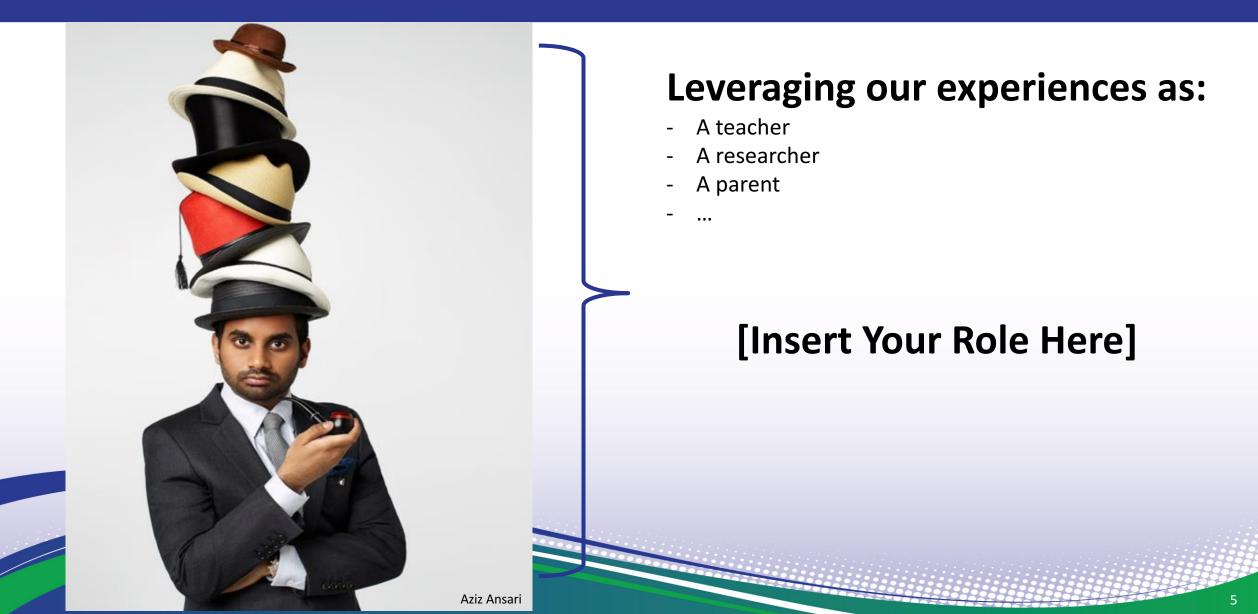
Multiple Partnerships in Education

- Public schools
- Psychiatric/ residential centers and clinics
- Foundations
- Local education agencies
- State education agencies
- Federal agencies
- Non-profit organizations
- Universities

But Not At The Same Time



Leveraging Multiple Hats



Leveraging Multiple Hats

ADAPTIVE IMPLEMENTATION

NAVIGATING THE SCHOOL



RYOKO YAMAGUCHI, WITH LAUREEN AVERY, JASON CERVONE, LISA DIMARTINO, AND ADAM HALL

WHY ADAPTIVE IMPLEMENTATION?

Challenges to Leveraging Multiple Hats

- Not speaking the same jargon... but the same words
- Tension between development/improvement and fidelity of implementation
- Not learning from adaptations made in the field

Challenge 1: "You say Tomato, I say Tomato"

What We Say	What We Mean
 Researchers Data Evidence Partnerships 	 Researchers Generalizable, no selection bias WWC (internal validity) Where I can get data
 Policy Makers Data Evidence Partnerships 	 Policy Makers Accountability, Annual Measurable Objectives (AMOs) Experts, curriculum/ standards developers Where I can communicate
 Practitioners Data Evidence Partnerships 	 Practitioners Johnny in my class Johnny's DRP test went up from Sept to Dec What's that?

Challenge 2: Fidelity of Implementation

Summative Evaluation

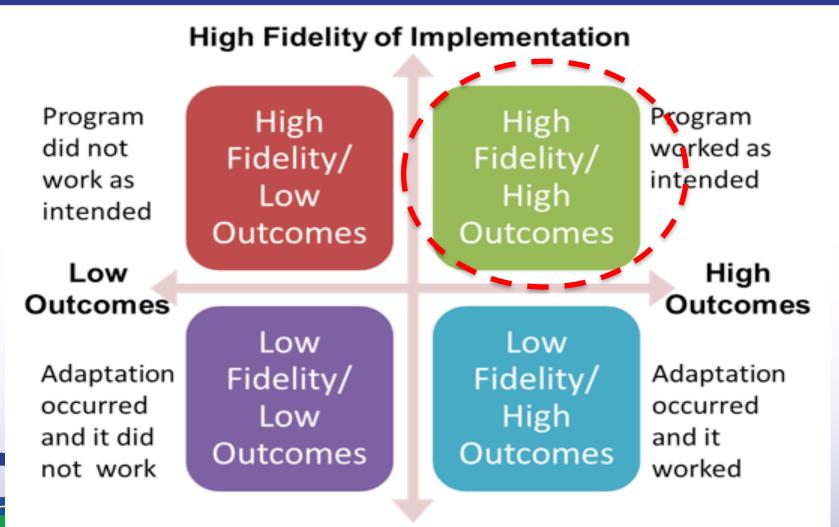
Development & Improvement

Fidelity of Implementation

High Fidelity of Implementation Program High High Program worked as did not Fidelity/ Fidelity/ work as intended High Low intended Outcomes Outcomes Low High Outcomes Outcomes Low Low Adaptation Adaptation Fidelity/ Fidelity/ occurred occurred High Low and it did and it Outcomes Outcomes worked not work

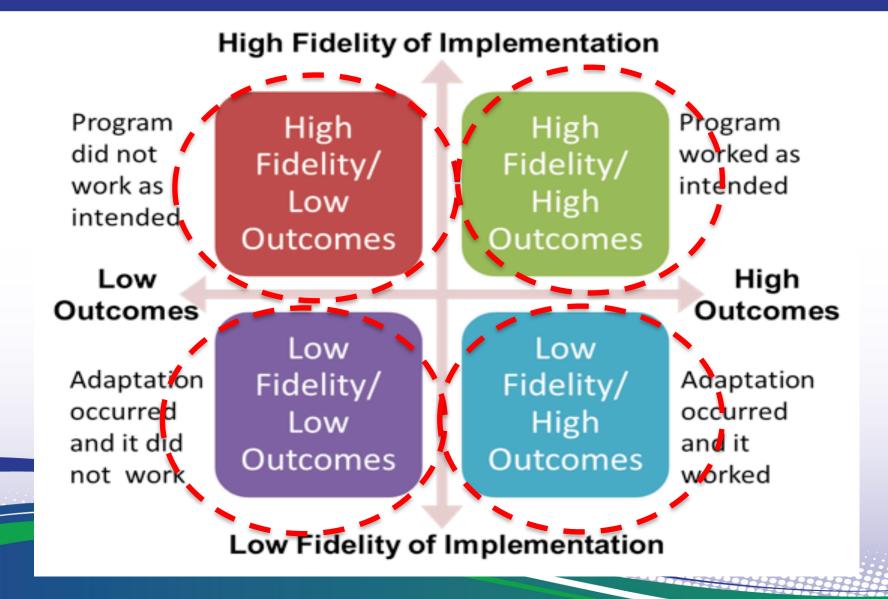
Low Fidelity of Implementation

Summative Evaluation



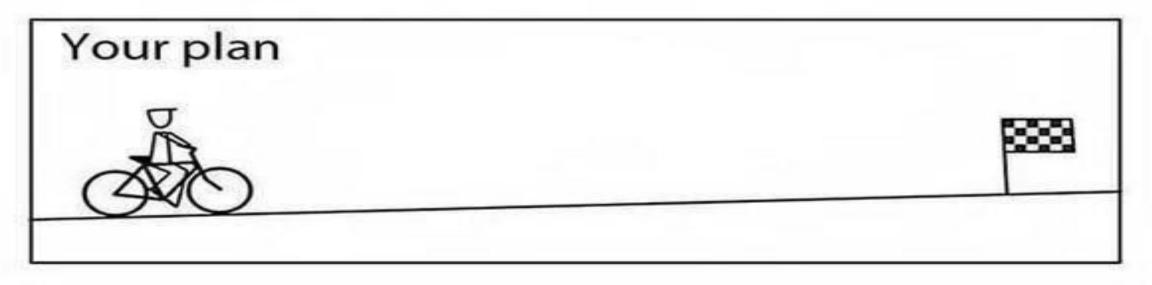
Low Fidelity of Implementation

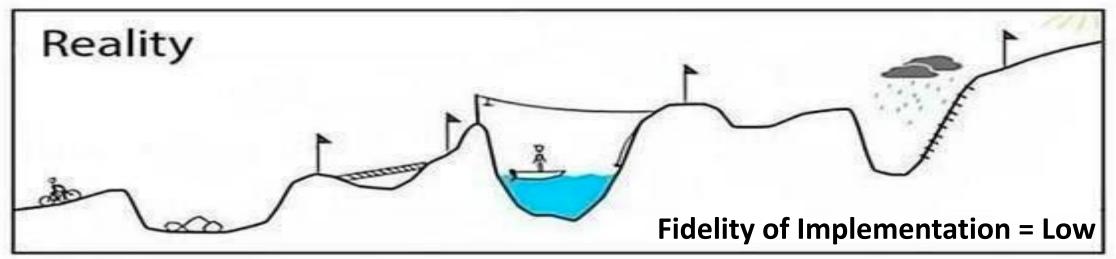
Program Development & Improvement



13

Challenge 3: Survival of the Fittest



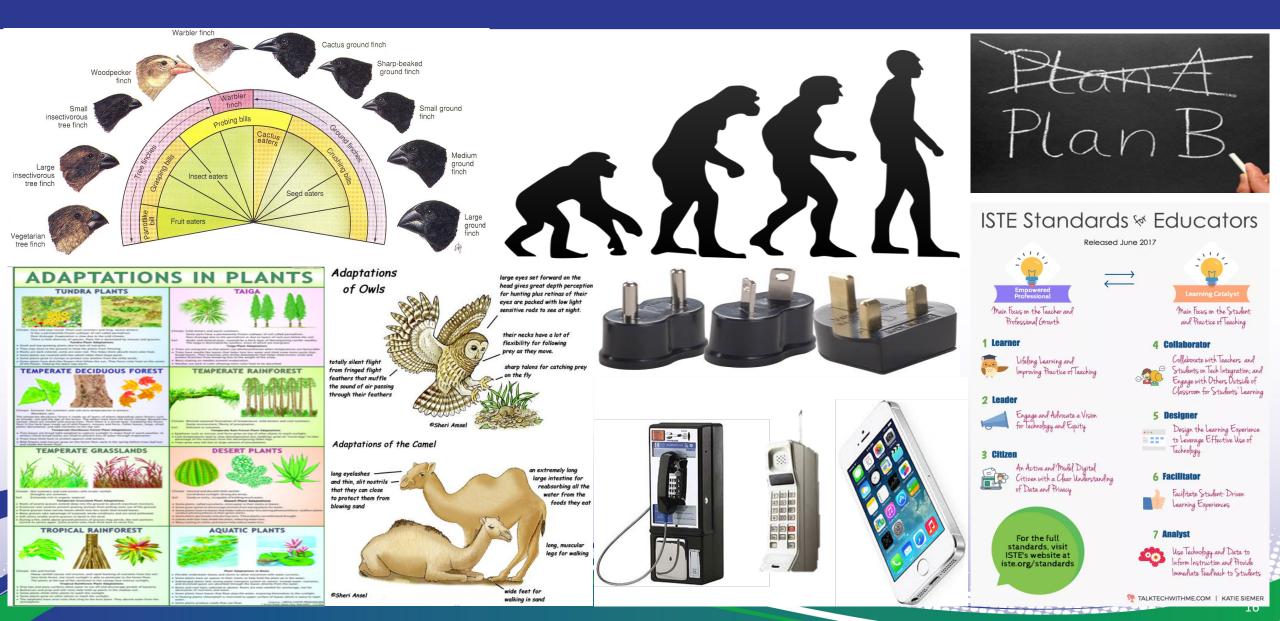


Adaptation

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is most adaptable to change."

Charles Darwin (1809 – 1882)

Adaptation Happens All Around Us



We Do It Every Day...



Our Core Goal: Make Healthy Meals for the Family





Hangry Kid Alert!



Don't Feel Guilty... Adapt!

... But this is what happened.









Adaptation Happens in Education

				work	shee	t A					Nan	ne			-	Seco		/1	m
	2 3	4						ion			ts () - C			_	Scut			
+	4	+	6	+	3	+	0	+	4	+	7	+	3 4	+	2 1	+	2 7		9
+	8 0	+	4	+	1 5	+	3 8	+	5 8	+	7 9	+	5	+	3	+	0	+	5
+	0	+	2 4	+	2	+	9 7	+	1	+	4 9	<u>+</u>	6	+	2	+	7	+	4
+	1	+	7	+	6 5	+	4	+	2	+	2 5	+	6	+	8	+	0 3	+	6 7
+	4	+	9 8	+	3	+	8	+	5	+	3 5	+	1 7	+	7	+	2	+	8 4
+	1	+	42	+	0 4	+	2	+	7 3	+	47	+	3 9	+	5 5	+	3 0	+	1 6
+	9 9	+	1 9	+	0 6	+	5 9	+	1	+	9 2	+	78	+	6 4	+	8	+	9
+	6 6	+	0 7	+	2	+	3	+	7	+	9	+	8	+	6 0	+	5	+	8
+	8	+	0	+	6 1	+	5 7	+	5	+	9 6	<u>+</u>	4	+	0 9	+	1	+	3
+	0 8	+	7 7	+	5 1	+	8 7	+	1 1	+	2 6	+	7 4	+	9 3	<u>+</u>	6 9	+	9 5

Typical worksheet with various uses:

- Homework assignment
- Quick formative assessment during class
- Work assignments for substitute teachers
- Flipped classroom for in-class work
- Regular in-class work
- Supplemental assignment

Adaptation Happens in Education

Addition F Minute M 1 2 3	larker	A	Addit					Score	/100	Addition F	acts 0-18	
4	6	3	0					2	9			
+ 4	+ 3	+ 7	+ 2	+ 8	7 + 1	3 + 4	+ 1	+ 7	+ 1	_		_
										Λ.	1	Q
8	+ 6	+ 5	- 3 + 8	+ 8	7	+ 2	3 + 1	+ 0	5 + 4	T	L	0
+ 0	+ 0	+ 5	+ 8	+ 8	+ 9	+ 2	+ 1	+ 0	+ 4			
0 + 1	<u>+ 4</u>	2 + 2	9 <u>+ 7</u>	+ 8	+ 9	6 <u>+ 8</u>	2 + 9	7 <u>+ 5</u>	4 + 1	<u>+ 4</u>	<u>+ 5</u>	<u>+ 9</u>
+ 3	7 <u>+ 0</u>	6 + 5	4 + 0	2 + 3	2 + 5	6 <u>+ 2</u>	8 + 8	0 <u>+ 3</u>	6 + 7			
4 + 5	9 + 8	3 + 3	8 + 9	5 <u>+ 6</u>	3 + 5	1 + 7	7 <u>+ 2</u>	2 + 2	8 + 4	Adapted		
+ 4	<u>+ 2</u>	0 <u>+ 4</u>	2 + 0	7 + 3	<u>+ 7</u>	3 <u>+ 9</u>	5 <u>+ 5</u>	3 + 0	+ 6	Draw it out:	Draw it out:	Draw it out:
9	1	0	5	1	9	7	6	8	9			
+ 9	+ 9	+ 6	+ 9	+ 0	+ 2	7 <u>+ 8</u>	+ 4	+ 1	+ 0	In In In I	6	
6	0	2	з	7	9	8	6	5	В)	
+ 6	+ 7	+ 8	3 + 6	+ 6	+ 4	+ 5	+ 0	+ 3	+ 6		\mathcal{L}	
										A A A A	\sim	
8	0 + 5	6	5	5	9	4 + 3	0	1	+ 2)	
+ 5	+ 5	+ 1	+ /	+ 0	+ 6	+ 3	+ 9	+ 2	+ 2		\square	
0	7	5	8	1	2	7	9	6	9			
+ 8	+ 7	+ 1	+ 7	+ 1	+ 6	7 + 4	+ 3	+ 9	+ 5			
Copyright	02007 T.	Smith Put	dishing. A	ll rights re	served.			ww.tisboo	iks.com			

Why Adaptive Implementation?

- Improve teaching and learning through capturing and learning from adaptations
- Improve schools by capturing and learning from adaptations
- Applying "engineering" or "design thinking" into school improvement– Let's test it out!

WHAT IS ADAPTIVE IMPLEMENTATION?

Adaptive Implementation: What It Is **NOT**

- Fidelity of Implementation
- Static
- Evaluative and accountability
- Monitoring

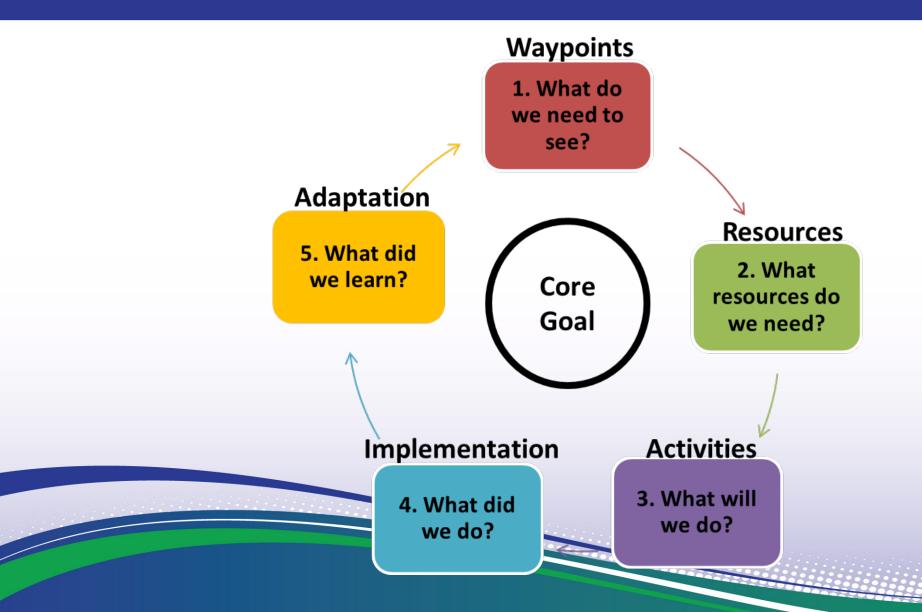
Adaptive Implementation: Our Goal (What It **IS**)

 Honor the education (teaching) profession by learning from teaching innovations and adaptations

 Continuous improvement cycle approach to understand which adaptations lead to improved outcomes

• **Collaboration** with teachers, school leaders, school coaches, technical assistance providers, researchers, program developers

Adaptive Implementation Process



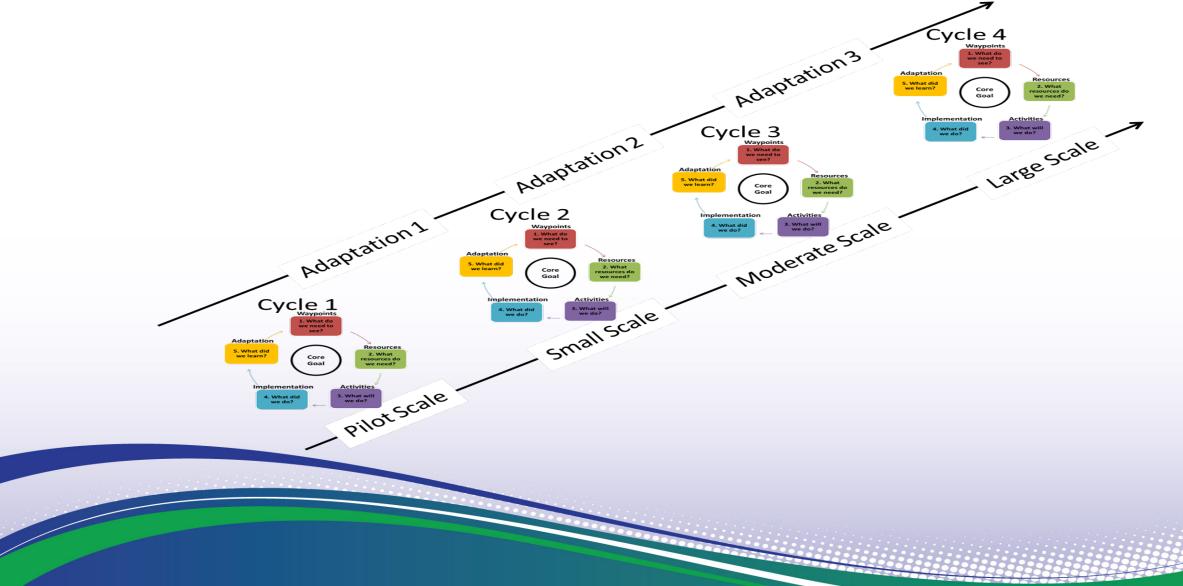
Takes a Licking, but Keeps on Ticking!



The state of the sector to an exact a sector of the sector



Adaptive Implementation Process: It Keeps on Ticking!



The Adaptive Implementation (AI) Team

- Recommend core group of people who are doing the work (implementing), including:
 - Developers
 - Educators
 - Administrators/ leaders
 - Researchers/ evaluators/ data scientists

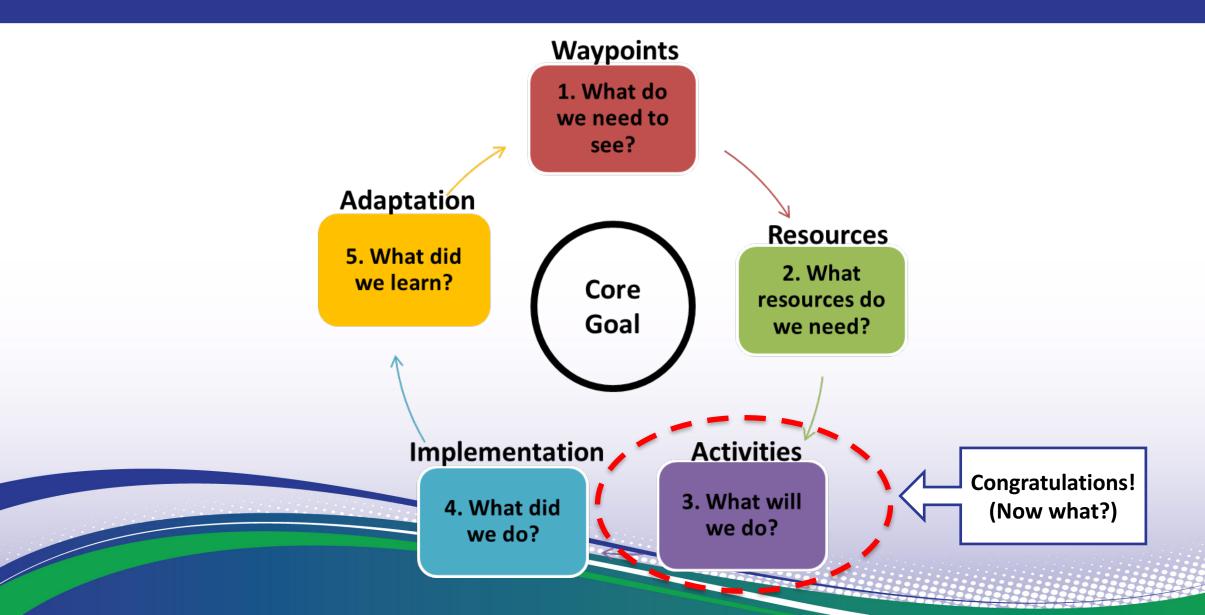
The Role of the Evaluator

- Helps to design and collect systematic data
- Plays a "Critical Friend" role
- Asks "Why" to see the larger picture
- Helps to identify adaptations
- Helps to cycle through iterations
- Pushes beyond "business-as-usual"

What is Adaptive Implementation?

- Al is a structured framework for a continuous improvement approach.
- Al is for professionals "on the front lines" who need to make adaptations in the field

Congratulations!! Now What?



Project Exc-EL: Case Example from Investing in Innovation (i3) Grant

- Project Exc-EL is a school-wide initiative that features three key components:
 - School climate and structures to support college and career readiness;
 - Teacher and staff training and technical assistance; and
 - Data-driven systematic coaching.
- Outcomes of interest includes:
 - Improve college readiness rates
 - Overall student outcomes of ELs



Project Exc-EL: Logic Model from the Proposal

Project Goals:

Goal 1. Educators and partners will possess the knowledge and skills needed to effectively educate ELs within a framework of tiered interventions.

Goal 2. Structural elements of each school will ensure EL students are part of a smaller learning community with a common team of teachers and personalization supports.

Goal 3. An interagency, inter-district team will be formed to leverage and share resources and provide support for at-risk EL students and their families. Goal 4. An objective evaluation process will be integrated into project activities to document and improve process and outcomes.

Activities:		Outputs:
1. SIOP based training	\implies	EL students will access and engage with academics in the classroom.
2. RTI based training	\implies	EL students will receive differentiated supports and enrichment activities based on their demonstrated progress and goals.
3. Teacher teaming	\implies	EL students will be well known by a team of teachers who meet regularly to explore their strengths and challenges and adjust their instructional approaches.
 Implementation of student advisory and PLPs 	\implies	EL students engage in ongoing and effective long term planning and access the resources needed to ensure they succeed.
5. Interagency team developed	\implies	EL students with critical needs (Tiers 2 and 3) will receive needed intervention and support through collaborative community- wide efforts.
Process and Impact evaluations conducted.	\implies	Project activities and progress will be strengthened through the use of continuous improvement mechanisms.

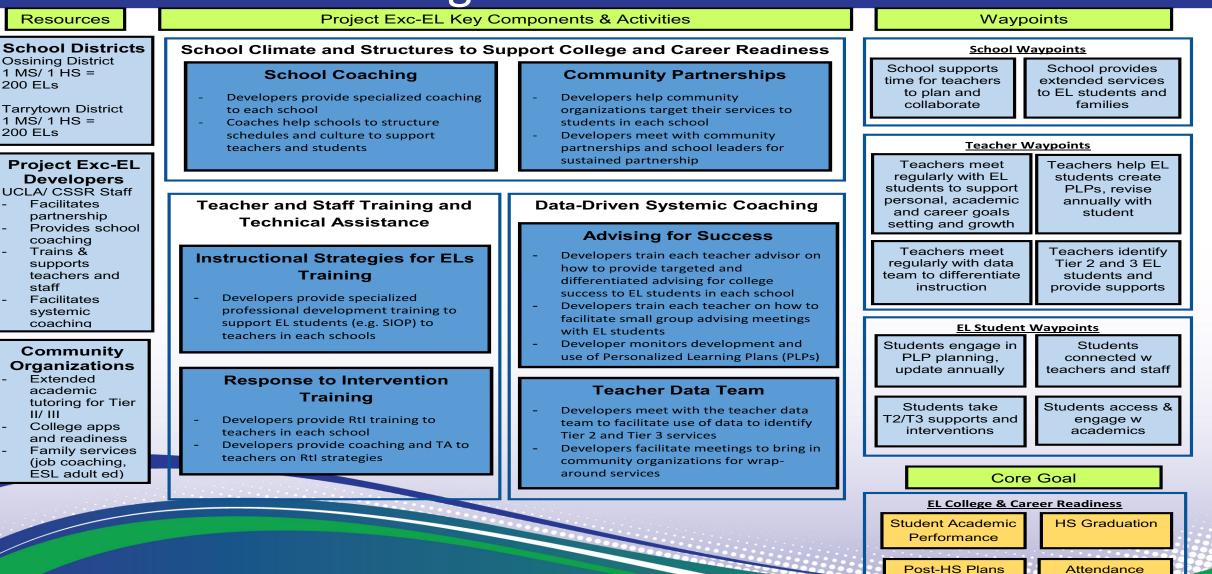
Project Outcomes:

- EL students are engaged, self-directed learners.
- EL students demonstrate proficiency on state assessments in core content areas
- EL students progress in school and remain on track to graduate.
- EL students graduate prepared to successfully engage in postsecondary education and careers.

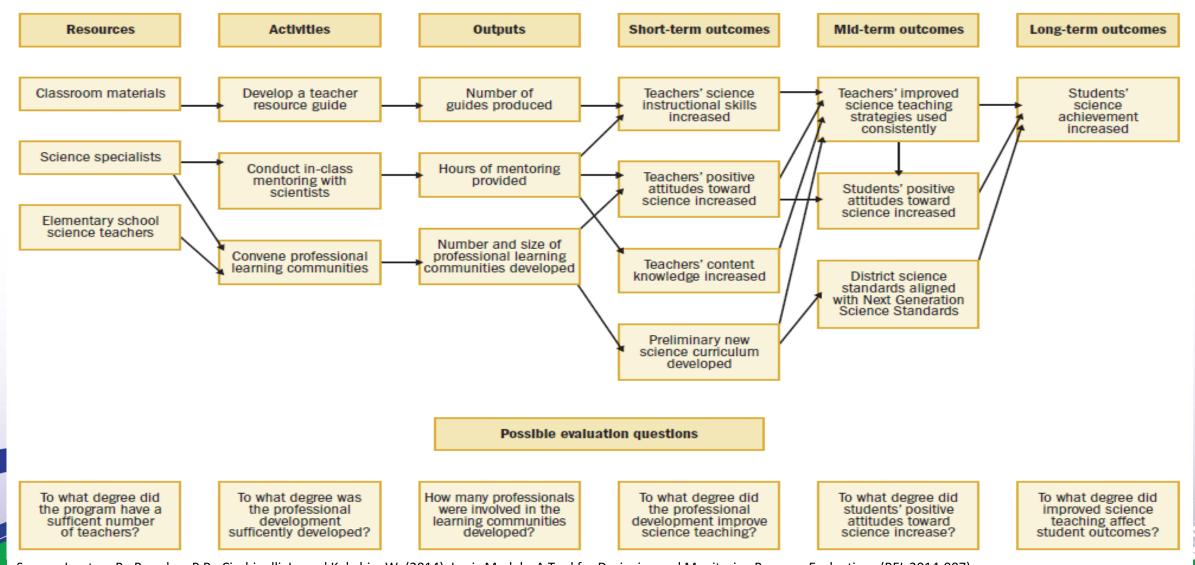
Long Term Outcome:

EL students are successful in postsecondary education and careers.

Step 3: What Will We Do? Design and Action Plan

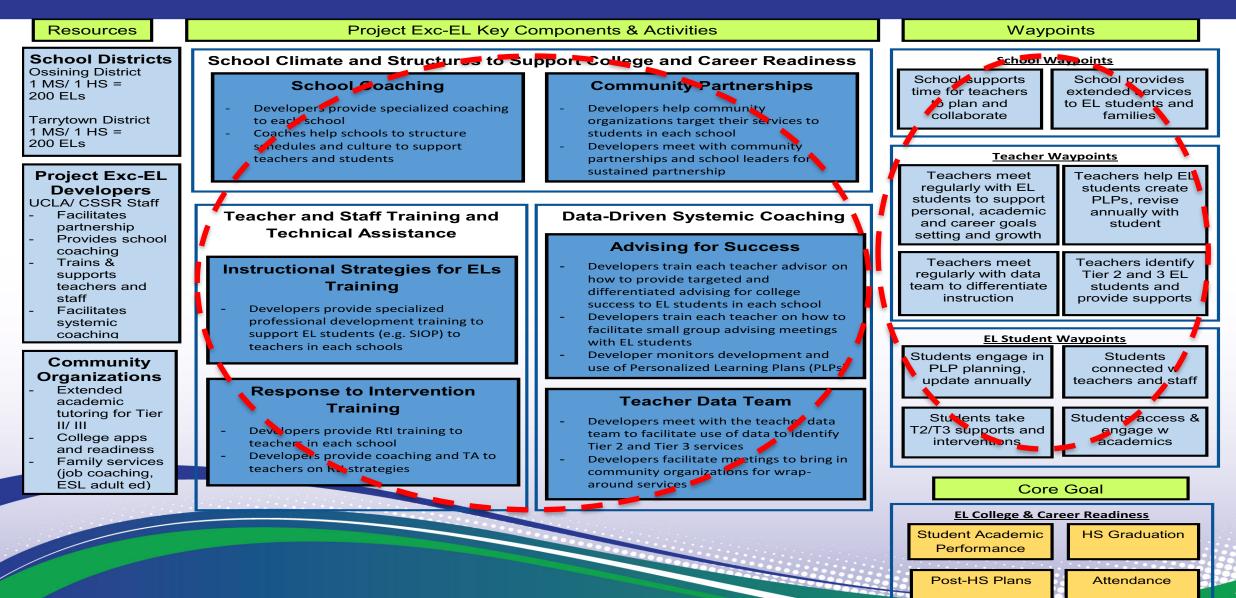


<u>NOT</u> a Logic Model for Evaluation

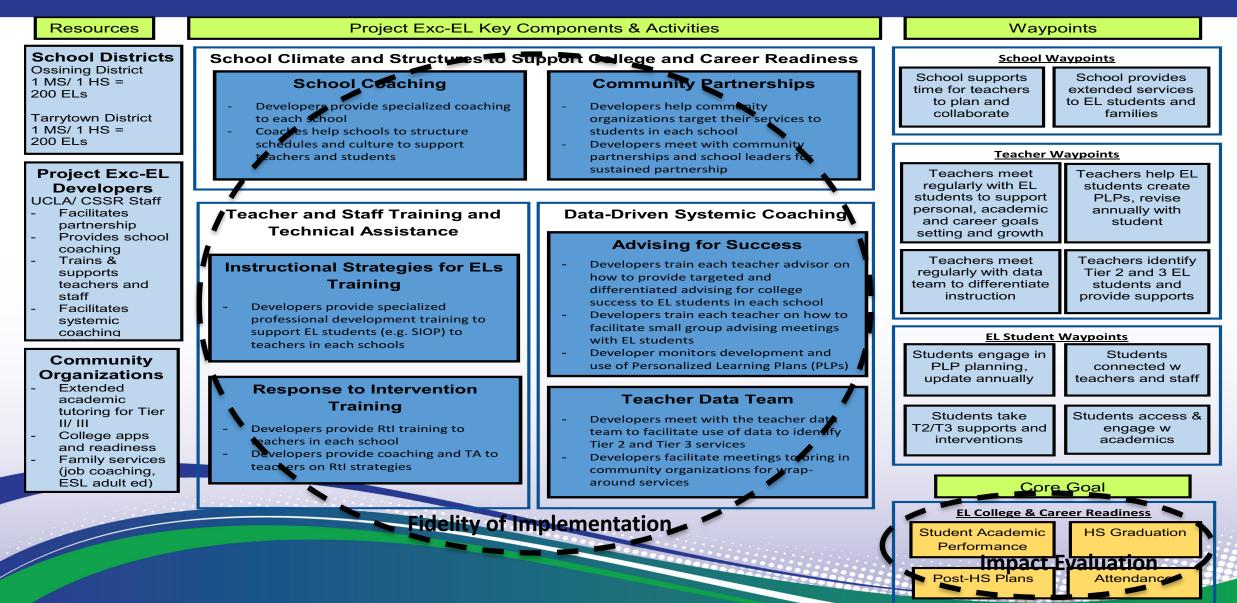


Source: Lawton, B., Brandon, P.R., Cicchinelli, L., and Kekahio, W. (2014). Logic Models: A Tool for Designing and Monitoring Program Evaluations (REL 2014-007)

Step 4: What Did We Do (or Did Not Do)?



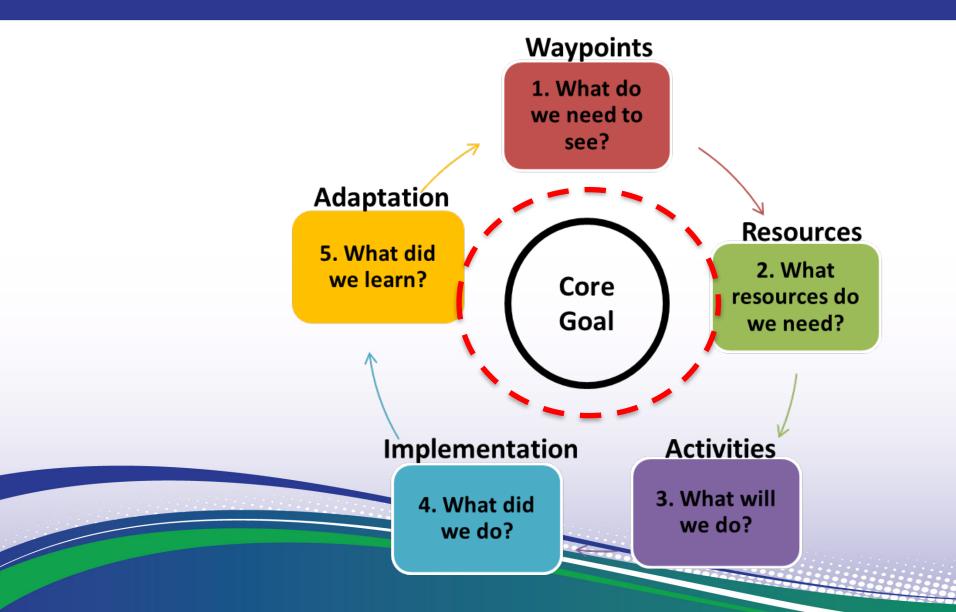
Implementation and Impact Evaluation



LET'S GIVE IT A TRY!



Core Goal



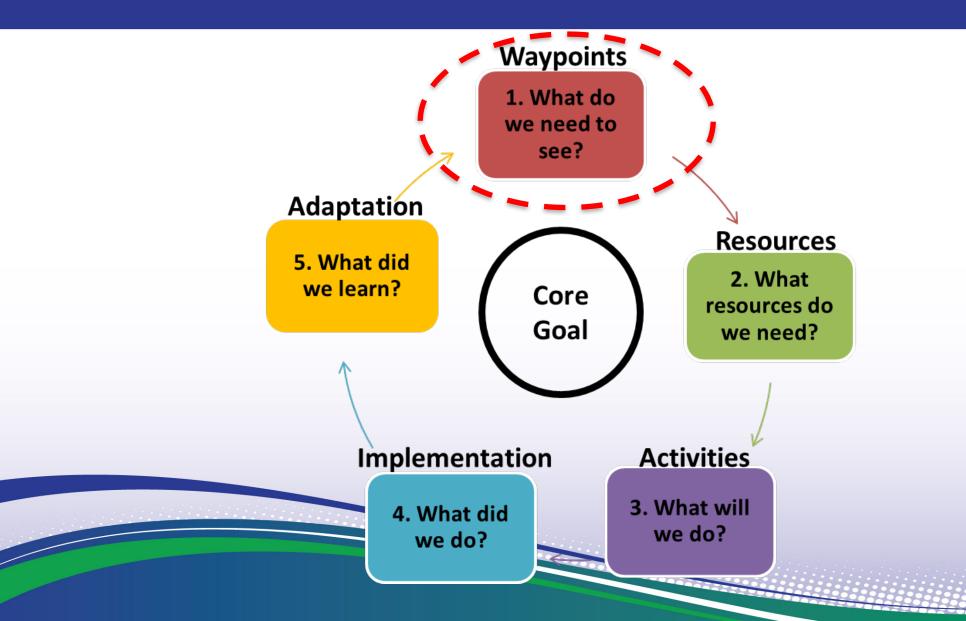
Small Group Activity: 5 Minutes

- Team up with your grantee and evaluation
 - Tip: I should see 16 small groups with grantee and evaluator sitting together.
- Al book for each grantee team You can keep it!
- Flip chart: Write your project title on the top
 - Tip: Turn the flip chart paper horizontally for more room.
- Post-it Notes

Write your core goals and place them on right



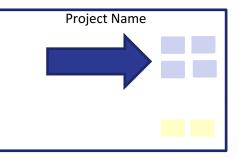
Step 1: What Do We Need To See?



Small Group Activity: 10 Minutes

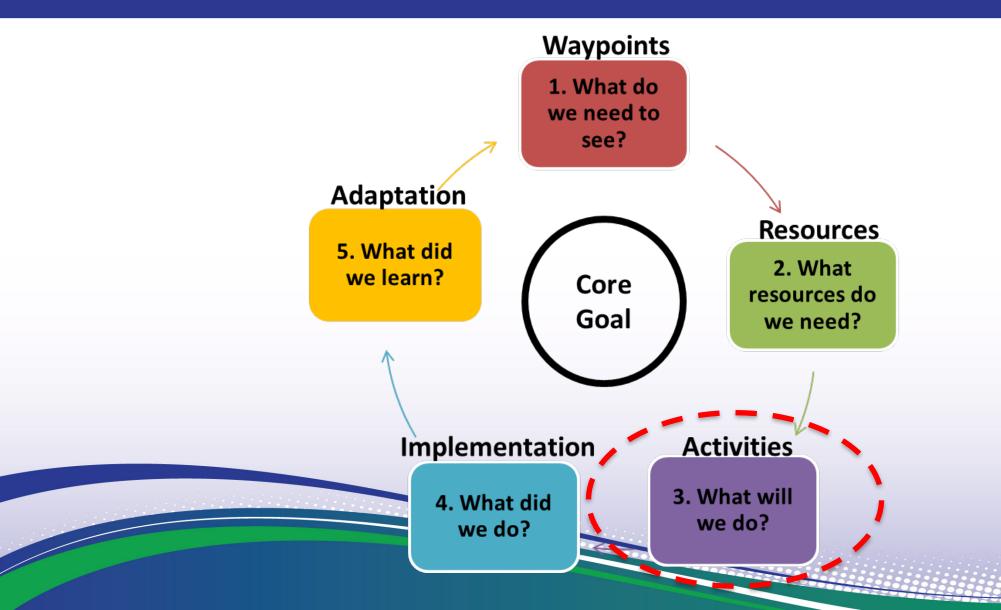
- Post-it Notes
 - Given your core goal, what **behaviors** should you see?
 - Waypoints should be:
 - Important to you
 - Things you can do
 - Demands effort and new learning
 - Builds on evidence of student need
 - Built by the people doing the work

Place waypoints on right-side of flip-chart, above core goal.



More information: Go to p. 21 in Al book, or p. 88 in Appendix (Waypoint Assessment Tool).

Step 3: What Will We Do?



Small Group Activity: 15 Minutes

- Post-it Notes
 - Write down one activity per note that makes up your program



- Activity Description: Very short description of key components (the "nonnegotiables") of your program with WHO, WHAT, and for WHOM
- Large Marbles. Focus on the large marbles... Don't get caught up on documenting every minute detail of your program

More information: Go to p. 46 in Al book, or p. 93 in Appendix (Design and Action Plan Template).

Place activities that make up your program in the middle of flip-chart

Project Name

Take A Step Back... Ponder

- 1. Does this make sense?
 - Does it have a logic and flow to it?
 - Is it cohesive? (Note: I did not say... "Comprehensive")
- 2. Can we capture adaptations?
 - Is there ways to collection information about "What Did We Do?" with what teachers did and what teachers did not do?

Taking This Home

- Design and Action Plans are great for:
 - Communicating
 - Project management and monitoring
 - Partnership development and collaboration
 - Collecting systematic data
 - Thinking through adaptations



Take-Aways

- Think about adaptations made in the field and how you can learn/ improve your model from them
- Create a core (AI) team... Partnerships are awesome!
- Keep iterating through...



Take-Aways

- Think about adaptations made in the field and how you can learn/ improve your model from them
- Create a core (AI) team
- Keep iterating through

THANK YOU!

Contact Information: Ryoko Yamaguchi ryamaguchi@plusalpharesearch.com

✓ @PlusAlphaRes

company/plus-alpha-research-&-consulting-llc

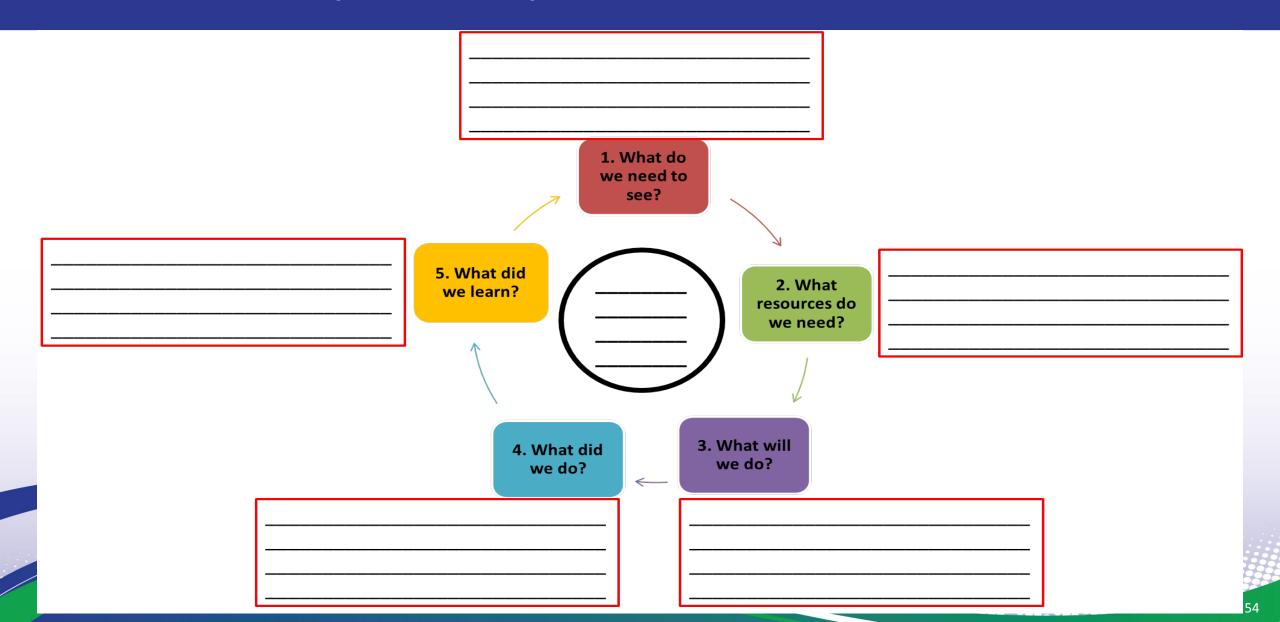
TEMPLATES FOR ADAPTIVE IMPLEMENTATION

Appendix: Templates By Each Step

AI Steps	Description	Tools & Protocols
Core Goal	A core goal is a high-priority set by districts and schools for practitioners to implement.	
Step 1: What do we want to see?	Observable and measurable waypoints (outcomes) aligned with the core goal.	Waypoint Checklist Waypoint Assessment Tool
Step 2: What resources do we have?	Resources include money, people, materials, and technology.	AI Resource Management Tool
Step 3: What will we do?	A roadmap of activities that leads to the waypoint.	Pro Con Assessment (PCA) Design and Action Plan (DAI
Step 4: What did we do?	An annotation of the roadmap of activities to describe what and how it was done.	Data Review Sheet
Step 5: What did we learn?	An honest assessment of what was done, what worked, what did not work, and what to do next.	Discussion Protocol Tool

THE H

Adaptive Implementation Process



Step 1: What Do We Need to See?

Waypoint:



It doesn't impact what I do every day, and I can't really affect it. No ownership. Wasting my time.



Meh! I'm a good sport and I'll play along.



This is why I went into education! And it affects what I do every day. It's going to make me better at my job.

Step 1: What Do We Need to See?

Five Characteristics of Strong Waypoints

- □ They focus on things that are important to you.
- □ They focus on things you can do.
- □ They demand effort and new learning.
- □ They are built on evidence of student need.
- □ They are built by the people doing the work.

Money

Carefully consider the type of money you're seeking to access or use. Examples include:

- Are you using grant money that can only be used for certain things?
- Are you following federal, state, and local audit guidelines in your proposed use of the money?
- Are there other funding sources that might cover the same things?
- Have you considered fundraising to create additional resources?

While money truly is just another tool to be used effectively and efficiently, it is a resource that requires conversations with fiscal/financial staff to ensure appropriate usage and effective tracking of expenditures.

What you have (Resources)	What you don't have (Constraints)	What you could have (Opportunities)

People

Carefully consider staffing needs over time.

- Unlike money, materials, or technology, staffing requires an extra measure of careful thought because it involves the well-being and security of people and their families.
- Whether you work in a union, right-to-work or other environment, you're entrusting people with important tasks that need to be matched with skills, commensurate pay and benefits, and a funding stream.
- While it may the norm in education to slide individuals around as grant funds and special pots of money become accessible, thereby bridging staffing and funding, it is not an effective way to recruit and retain committed professionals.

Does the intended role of a new staff member require highly specialized skills, or would this present an opportunity for community engagement and volunteer opportunities? Is there a community partner who could provide similar expertise?

What you have (Resources)	What you don't have	What you could have			
	(Constraints)	(Opportunities)			

Materials

Materials are often combined or conflated with money, but the need to split these two categories of resources is tantamount to understanding the nature of resources available to you.

- Materials may be included in the fees or funds expended when purchasing or obtaining models or packages of resources—don't be afraid to ask leaders and vendors what is included (is it digital? can you copy it?), when materials will be available, and what the cost of additional materials is. Get this in writing when feasible and appropriate.
- Materials may be available as donated goods or at a reduced price through local affiliates.
- Materials may have already been purchased or may be purchasable through extant purchasing agreements or existing programs. Don't duplicate efforts because you're afraid to ask.

Is there a community partner, state/federal office, or philanthropic organization tasked with providing resources in this area?

What you have (Resources)	What you don't have (Constraints)	What you could have (Opportunities)				
	(00120100200)					

Technology

While technology has traditionally been fetishized in educational circles and settings, it may help to plan for technology needs as if it is merely another type of material. However, given purchasing constraints and existing agreements, technology may need to be tracked separately based on your local context. Though used to frame technology here, the following questions can be used for the categories above as well:

- What critical need does the technology fill? Can this need be filled with extant resources?
- Is the technology worth it? It doesn't take many gimmicky do-dads to get to a fulltime teacher's salary (especially when one adds in service contracts, extended warranties, etc.). Ensure that the technology adds real value.
- Again, is there another source that could fund this technology?

If the technology didn't exist, how would you do what you want to do without it? Is the answer more cumbersome than the purchasing process, the expenditure of funding, the training needed to effectively use the technology, and the need to maintain the technology?

What you have (Resources)	What you don't have (Constraints)	What you could have (Opportunities)

What 3: What Will We Do?

Resources	Key Components & Activities		Waypoints	
Resource 1	Activity 1 (Name):	Activity 2 (Name):	Waypoint 1:	
Resource 2			Waypoint 2:	
	Activity 3 (Name):	Activity 4 (Name):	Waypoint 3:	
Resource 3				
	Activity 5 (Name):	Activity 6 (Name):	Core Goal	

Step 4: What Did We Do?

Waypoint: ____

Activities and Key Components Activity: Describe	Yes: All the time	No: Some of the time	No: Not at all	Notes	
Activity: Describe					
Activity: Describe					
Activity: Describe					
	_				

Step 5: What Did We Learn?

