



C24 - Data Driven Technology Planning with MICIP

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Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Introduction

- The MICIP/EdTech Integration Team
- Purpose of this presentation
 - Our purpose is to discuss why District Technology Leaders should be in the CI process and provide some examples of how MICIP and CI can be used to improve technology in your district
- What will we be talking about today?
 - The MICIP/EdTech Integration Committee (10 minutes)
 - The role of technology professionals in the CI process (10 minutes)
 - Examples (25 minutes)
 - Continued Development and Support (5 minutes)
 - Q & A (20minutes)



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

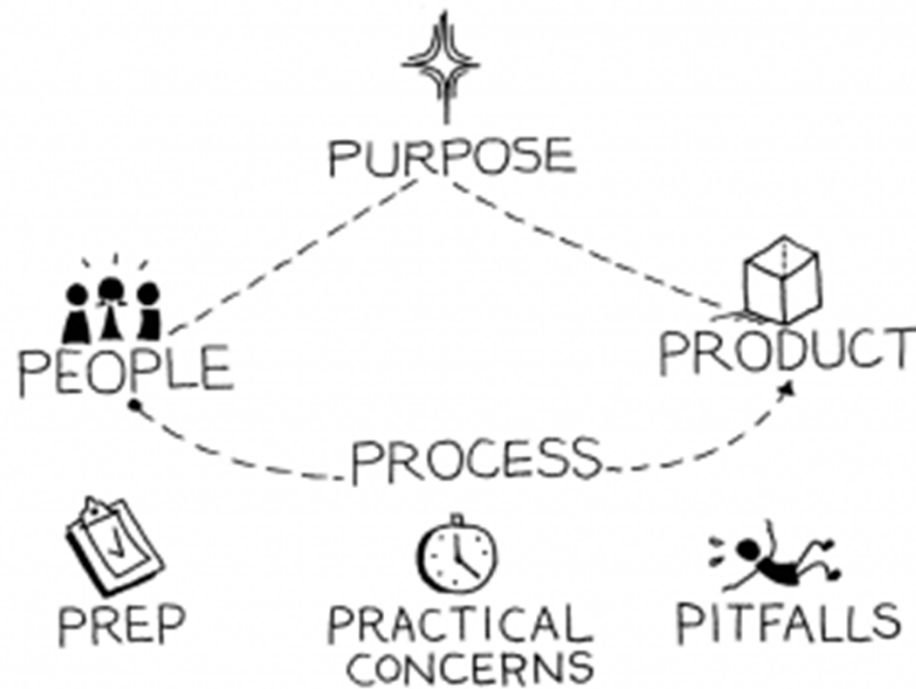
Who's Here?

- LEA
- PSA
- ISD
- Role



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

MICIP/EdTech Integration Committee



Having technology representatives at the table from the start

What unique perspectives do Technology Professionals have?

- Sales people sometimes misrepresent their products (e.g. offline access)
- Vendors address known pain points, but may not be looking at long term impact (TCO, ROI)

What unique data do Technology Professionals have access to?

- Hidden costs - add-ons, implied costs, human resources
- Connectivity - what are some opportunities and limitations with connectivity?
- Infrastructure - can your current infrastructure support the new program?
- Device and software use metrics

Other areas that Technology Professionals are content experts

- Goal Setting, Strategies, Funding, Evaluation



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Technology Professionals and the Continuous Improvement (C.I.) Process

LEARNING TARGETS:

- WHY should technology representatives should be at the table from the start
- HOW/WHAT of the CI process and MICIP for Technology Planning



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Using CI and MICIP for Technology improvements - WHY?

- Embed technology into strategies
- Align resources and priorities - funding, equipment
- Justify technology investments
- Anticipate obstacles / challenges
- Discern “Cool” vs “Practical”
- Innovate instruction
- Enhance student engagement & skills



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Having technology representatives at the table from the start

1. Tech is used to CI (Plan->Assess->Implement->Monitor->Evaluate->REPEAT)
2. We have data sets! (Connectivity, devices,etc)
3. Technology is likely a part of everything! (from lunch, to busing, to payroll to learning).
4. We help find strategies! (classroom AV, infrastructure, security).



Having technology representatives at the table from the start [Assess]

- Technology specific data like connectivity, device capacity, training, infrastructure capacity, etc.
- Device and software use metrics
- Adding technology elements to survey data.
- MITECS/21st Century Learning Data



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Having technology representatives at the table from the start [Plan]

- Funding and budgeting
 - Hidden costs - add-ons, implied costs, human resources
 - Sales people sometimes misrepresent their products (e.g. offline access, accessing known pain points and not focusing on TCO, ROI, etc.)
- Connectivity - what are some opportunities and limitations with connectivity?
- Infrastructure - can your current infrastructure support a new program? What infrastructure improvements are necessary?
- Tech centered or relevant strategies
- Goals and metrics determinations



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Having technology representatives at the table from the start [Implement->Monitor->Evaluate]

- Training and professional development
- Device and infrastructure roll-out
- Collecting and analyzing data
 - App and site access data (engagement data)
 - Equity considerations
- We pilot, because things things do not always work “as advertised”

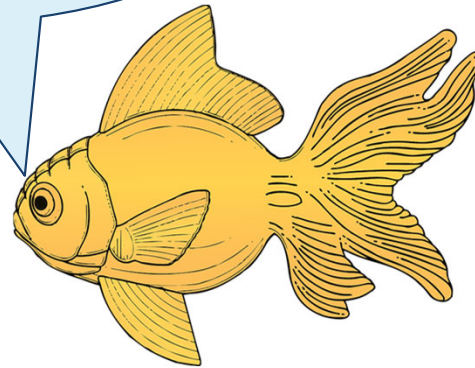
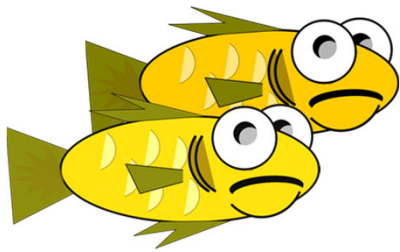


Bringing the Voice of Technology Leaders into the Continuous Improvement Process

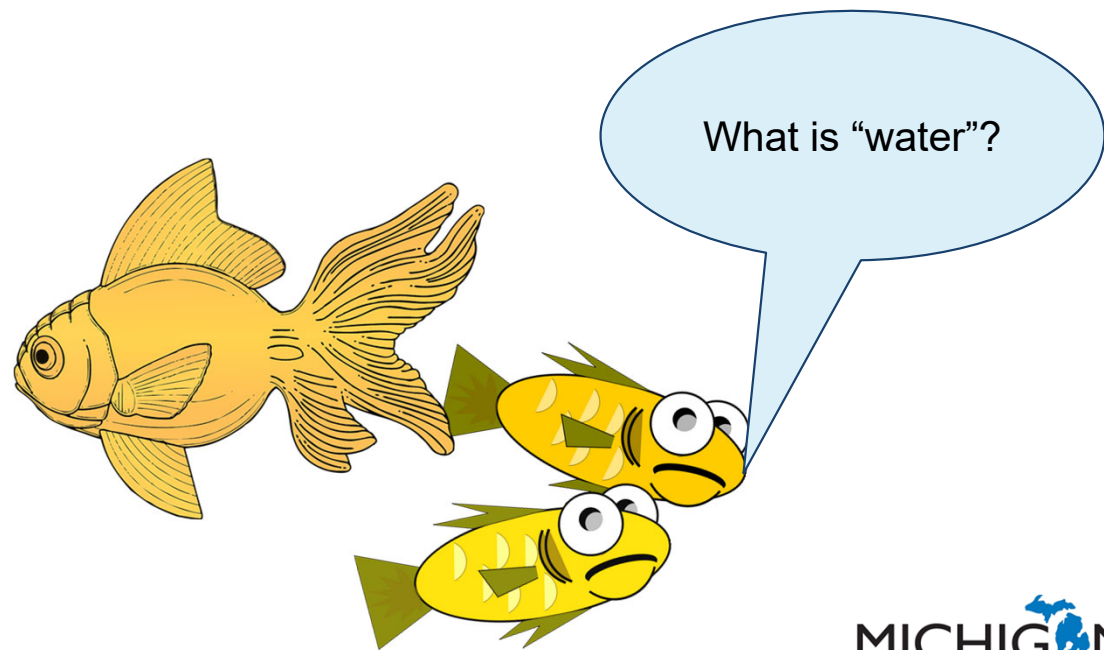
HOW can MICIP be used for Tech Planning?



Good morning!
How's the water today?



Bringing the Voice of Technology Leaders into the Continuous Improvement Process



Using CI and MICIP for Technology improvements - Process

Technology leaders live change and improvement

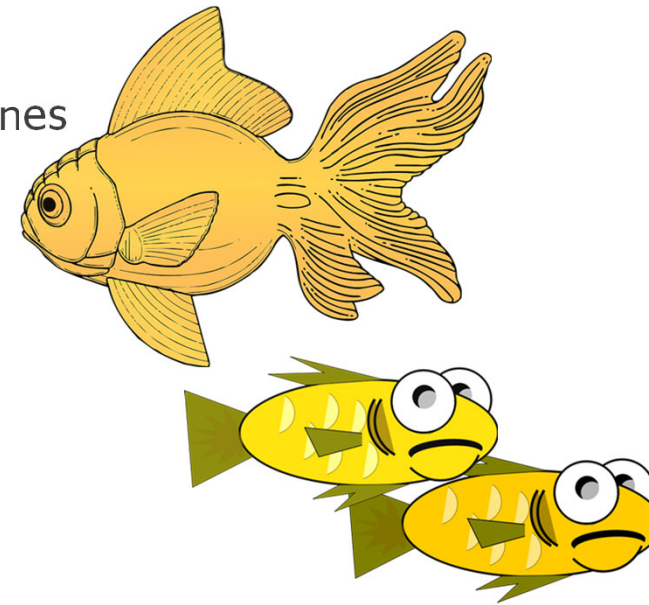
- Usually faster, without documentation and shorted timelines
- Sometimes driven by outside forces

Communicate and get buy-in on:

- Obstacle
- Impact
- Data
- Objectives

Provide assistance with:

- Documentation



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Examples

The purpose of our examples is to show how Technology Professionals can use MICIP for Technology Planning and how their voice from the start is imperative to a successful CI process.


Case Studies / example {Templates}

- Connectivity Planning (Focused on both curriculum and technology)
- [Device Planning](#) (Focused on technology, but curriculum is an important component)
- Cybersecurity



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Community Connectivity - Template



Kent ISD

DISCOVER ▾

PLAN ▾

IMPLEMENT ▾

REPORT

Hi, Nick ▾

Whole C

District Da

Discover Data

Explore and group data learner outcome and systems data for your district.

Analyze Data

Analyze data to discover the root cause of issues you are currently presented with.

Data Story Name

test Copy

test Copy_1

Category

Arts

Arts

Status

Data Story

Data Story

Last Edited

01/04/2021

03/15/2021

By

Stephanie Villalta

Stephanie Villalta

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Community Connectivity - Template

Academic 3 Templates	Non-Academic 4 Templates	Systems 3 Templates
<div><div><div><div><div></div><div></div></div><div>+</div><div>Assessment / Data Systems</div><div>0 Templates</div></div><div><div><div></div><div></div></div><div>+</div><div>Communication</div><div>1 Template</div></div><div><div><div></div><div></div></div><div>+</div><div>Curriculum & Instruction</div><div>0 Templates</div></div><div><div><div></div><div></div></div><div>+</div><div>Facilities Management</div><div>0 Templates</div></div><div><div><div></div><div></div></div><div>+</div><div>Finance</div><div>0 Templates</div></div><div><div><div></div><div></div></div><div>+</div><div>Food Service</div><div>0 Templates</div></div><div><div><div></div><div></div></div><div>+</div><div>HR / Talent Management</div><div>0 Templates</div></div><div><div><div></div><div></div></div><div>+</div><div>Leadership</div><div>0 Templates</div></div><div><div><div></div><div></div></div><div>+</div><div>Professional Learning</div><div>1 Template</div></div><div><div><div></div><div></div></div><div>+</div><div>Student Support</div><div>0 Templates</div></div></div><div><div><div></div><div></div></div><div>-</div><div>Technology - Infrastructure & Connectivity</div><div>1 Template</div></div><div><div><div></div><div></div></div><div></div><div>An assessment of off-campus connectivity from local, regional, and state perspectives. (Community Connectivity)</div></div></div>		

Community Connectivity - Template

Data Set: An assessment of off-campus connectivity from local, regional, and state perspectives. (Community Connectivity)

What does the availability of broadband internet look like in my district, ISD, or region? What does the Digital Divide look like in the service area? Gaps in connectivity impede remote learning opportunities for students and staff members. This information can be used in conjunction with other available data sets to assess other areas effecting student outcomes and engagement.

District-level Data on Broadband to the Home (Local)



Upload District Data Prompt

Source: District Determined

ISD-level Data on Broadband Availability (Regional)



Upload District Data Prompt

Source: District Determined

Connected Nation Michigan State-Level Broadband Accessibility Maps



Upload District Data Prompt

Source: District Determined

Connected Nation Michigan County-by-County Broadband Accessibility Maps



Upload District Data Prompt

Community Connectivity - Template

Connected Nation Michigan State-Level Broadband

Why is this data object part of this data set template?

Used as a secondary data source, this data set can be used to confirm or question locally collected data. Again, what infrastructure exists in an area? What partners might collaborate in a public/private endeavor to expand broadband service? ConnectedNation MI; Communities & Institutions, Coverage Maps; State Maps ConnectedNation MI; Communities & Institutions; Broadband Coverage Maps; Interactive Map.

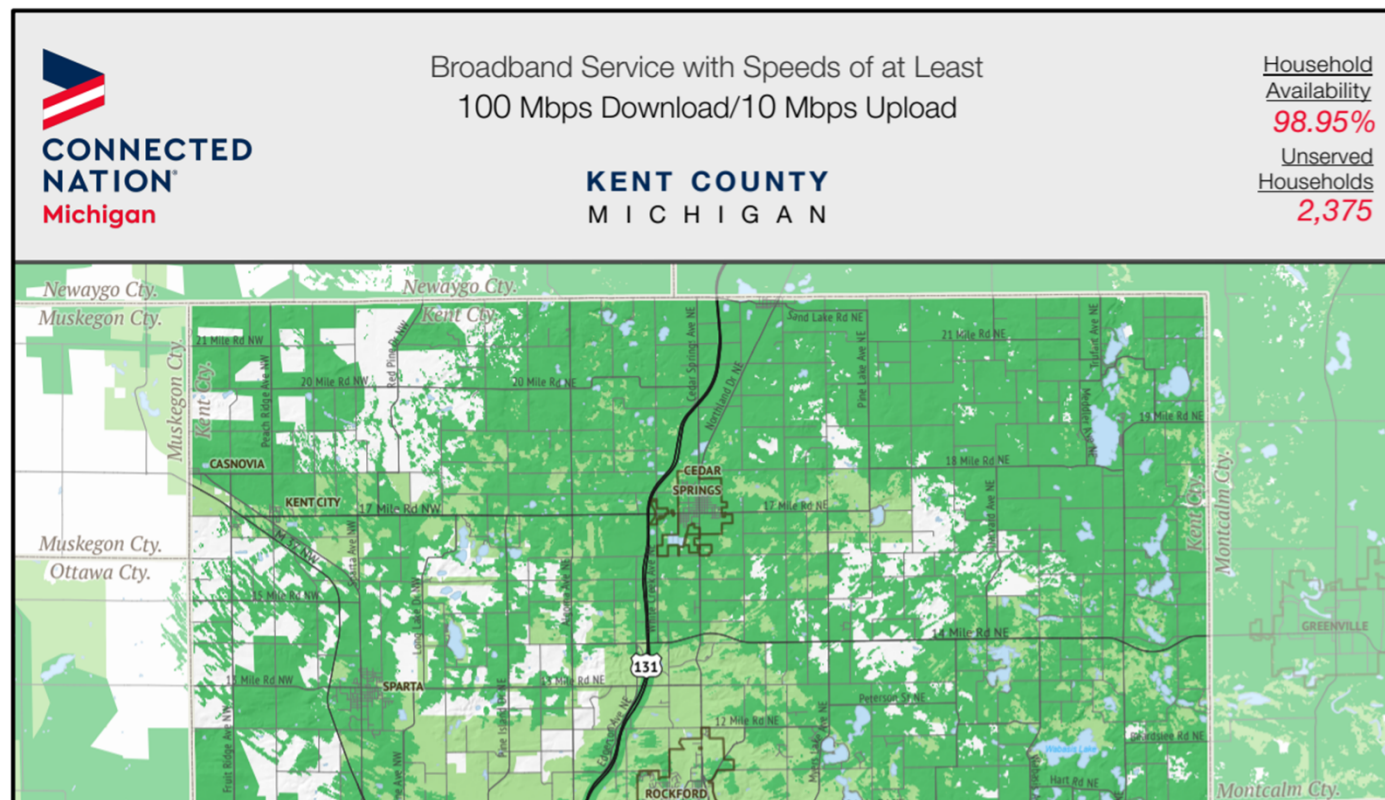
Where should this data object originate from?

District Determined

How can this data object be found?

Used as a secondary data source, this data set can be used to confirm or question locally collected data. Again, what infrastructure exists in an area? What partners might collaborate in a public/private endeavor to expand broadband service? ConnectedNation MI; Communities & Institutions, Coverage Maps; State Maps ConnectedNation MI; Communities & Institutions; Broadband Coverage Maps; Interactive Map.

Community Connectivity - Template



Community Connectivity - Template

Analyze the District Data Story:

An assessment of off-campus connectivity from local, regional, and state perspectives.
(Community Connectivity) Copy



District Data Story

We have good coverage. We need to do better at reaching out to families. We will still have some families that are defined as homeless ...

[View District Data Story](#)

Root Cause

You're on this step now. Once the Root Cause Analysis is complete, a Challenge Statement can be created.

Analyze the Root Cause

Select a Root Cause tool to analyze this District Data Story with.



5 Whys



Fishbone



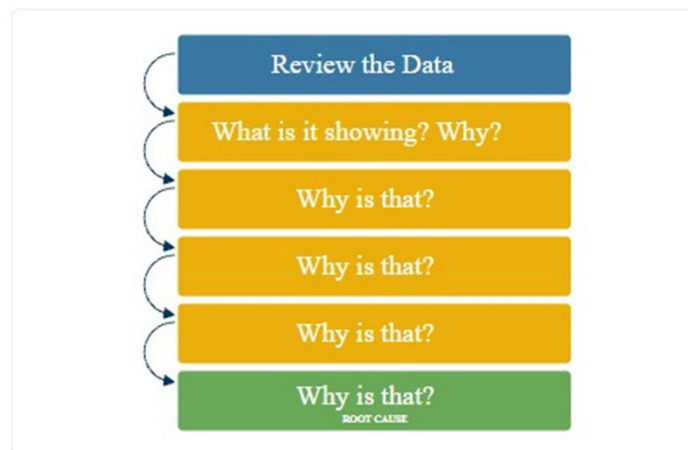
Add Your Own

Community Connectivity - Template

Analyze the Root Cause

Tool Selected: The 5 Whys [Change Tool](#)

Reference the District Data Story to answer the following questions. The last "why" will be the Root Cause of the District Data Story.



Explain why the above Data Story is in the state it currently is.

↶ ↷ Paragraph ▼ **B** *I* ≡ ≡ ≡ ≡ ≡ ≡

Explain why...

+ Add "Why"

Finish Analysis

Community Connectivity - Template

Analyze the District Data Story:

An assessment of on-campus connectivity from local, regional, and state perspectives.
(Community Connectivity) Copy



District Data Story

We have good coverage. We need to do better at reaching out to families. We will still have some families that are defined as homeless ...

[View District Data Story](#)

Root Cause

because we didn't use computers.

Create a Challenge Statement

Based on the results of the Root Cause Analysis, define the challenge in one sentence.

Example: The district needs to allocate resources to develop a system to implement GELN Literacy Essentials at School B and maintain resources to continue implementation and progress at School A.

↶ ↷

Paragraph

▼

B *I*

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Challenge statement...

Community Connectivity - Template

Define a Measurable Goal:

An assessment of off-campus connectivity from local, regional, and state perspectives.
(Community Connectivity) Copy

District Data Story

We have good coverage. We need to do better at reaching out to families. We will still have some families that are defined as homeless ...

[View District Data Story](#)

Challenge Statement

[Edit](#)

The district needs to help more families sign up for low cost programs.

Define Goal

Create a one-sentence goal to solve the issue defined in your Challenge Statement. The goal should include a measure and a due date.

Example: Our goal is to provide opportunities for students to study together, in order to improve ELA M-Step scores by 5% by 2022.

↶ ↷	Paragraph ▼	B <i>I</i>	≡ ≡ ≡ ≡	≡ ≡
Goal summary...				

Goal Due Date

11/01/2021



Community Connectivity - Template

include a measure and a due date.

Example: Our goal is to provide opportunities for students to study together, in order to improve ELA M-Step scores by 5% by 2022.

↶ ↷ Paragraph ▼ **B** *I* [List Icons] [Align Icons]

We want to have 20% more students with high speed internet by the end of 2022.

Goal Due Date

11/01/2021



Name Goal

Create a short title for the goal that describes the outcome you are targeting.

Example: Improve ELA M-Step

20 percent more students by 2021

Define Evaluation Impact Measures

End Targets

+ Add Measure

Interim Targets

Community Connectivity - Template

Define End Target Measure



Goal: We want to have 20% more students with high speed internet by the end of 2022.

QUANTITATIVE

QUALITATIVE

Select which data from your story you would like to track.

- ☒ District-level Data on Broadband to the Home (Local)
- ☐ ISD-level Data on Broadband Availability (Regional)
- ☐ Connected Nation Michigan State-Level Broadband Accessibility Maps
- ☐ Connected Nation Michigan County-by-County Broadband Accessibility Maps

How will the data change?

Increase in Value

Decrease in Value

% Change

20

Measure Due Date

11/01/2021



Measure Explanation (optional)

20% more students will have at least 100mbps internet access at home.

Add Measure

Community Connectivity - Template

Define Evaluation Impact Measures

End Targets

Measure	Due Date
Quantitative: Increase by 20% for <i>District-level Data on Broadband to the Home (Local)</i>	11/01/2021   

+ Add Measure

Interim Targets

+ Add Measure

Community Connectivity - Template

Define Interim Target Measure



Goal: We want to have 20% more students with high speed internet by the end of 2022.

QUANTITATIVE

QUALITATIVE

TASK

What is the task?

Have 1 open house that helps parents sign up for low cost internet.

Task Due Date

10/31/2021



Owner

Nick Morse



Add Measure

Community Connectivity - Template

Create Strategy Implementation Plan:

An assessment of off-campus connectivity from local, regional, and state perspectives.
(Community Connectivity) Copy



Challenge Statement

Edit

The district needs to help more families sign up for low cost programs.

[View District Data Story](#)

Measurable Goal

Edit

We want to have 20% more students with high speed internet by the end of 2022.

Select Strategies

What strategies can be utilized to achieve this goal?

[+ Add Strategy](#)

Community Connectivity - Template



SEARCH STRATEGIES

BROWSE STRATEGIES

 Search Strategies...

Strategies: 342 Results

"Building Thinking Classrooms in Mathematics" - Professional Learning and Application



#GoOpen Michigan Toolkit



1:1 Device Connectivity



21 Things 4 Students



2Revolutions



4R Skills



Accelerated Math



Accelerated Reader



Community Connectivity - Template


<

Select a Strategy of Interest

>

SEARCH STRATEGIES

BROWSE STRATEGIES



Search Strategies...

Show Filters

Data Systems Strategies: 9 Results

Data-Based, Decision Making

Instructional Leadership Routines

Learning-Focused Partnerships


Organization: Infrastructure - District-Wide Data System


Project Lead the Way (PLTW) Biomedical Science

Project Lead the Way (PLTW) Computer Science

Project Lead the Way (PLTW) Engineering

Student Support Network





Community Connectivity - Template

Brainstormed Connectivity Strategies

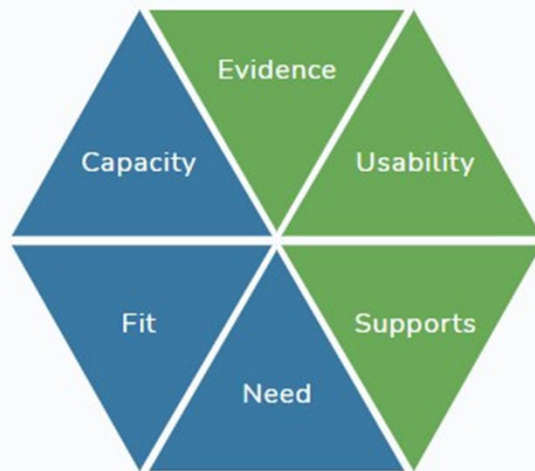
File Edit View Insert Format Data Tools Add-ons Help Last edit was made 8 days ago by anonymous

A	B	C	D	E
T IN STRATEGY LIST	LOCATION:	Strategy Title	Short Description	Source
			The Emergency Broadband Benefit will provide a discount of up to \$50 per month towards broadband service for eligible households and up to \$75 per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than \$10 and less than \$50 toward the purchase price.	
	SYSTEMS->Connectivity	CONNECTIVITY-Emergency Broadband Benefit (EBB)	The Emergency Broadband Benefit is limited to one monthly service discount and one device discount per household.	https://qetemergencybroadband.org/
	SYSTEMS->Connectivity	CONNECTIVITY-LifeLine	Lifeline is a federal program that offers a monthly benefit of up to \$9.25 towards phone or internet services for eligible subscribers (up to \$34.25 for those living on Tribal lands).	https://www.usac.org/lifeline/
	SYSTEMS->Connectivity	CONNECTIVITY-Emergency Connectivity Fund (ECF)	The Program will provide funding to schools and libraries for the reasonable costs of eligible equipment and services that can be provided to students, teachers, and library patrons who lack connected devices, such as laptop or tablet computers, and/or lack broadband access during the pandemic.	https://www.fcc.gov/emergency-connectivity-fund
	SYSTEMS->Connectivity	CONNECTIVITY-Help Families Connect with available services	Available programs: EBB, LifeLine.	https://www.fcc.gov/emergency-broadband-outreach-toolkit
	SYSTEMS->Connectivity	CONNECTIVITY-District Provides Services-Help families sign up for affordable internet	Help Families sign up (such as ELL), Application Assistance (family nights).	https://www.everyoneon.org/find-offer
	SYSTEMS->Connectivity	CONNECTIVITY-District Provides Services-Provide devices and service	Provide Devices and Service (Hotspots)	https://www.usac.org/lifeline/
	SYSTEMS->Connectivity	CONNECTIVITY-District Provides Services-Provide private LTE Service	Private LTE Service,	Utilize a tool like Everyoneon.org to see
	SYSTEMS->Connectivity	CONNECTIVITY-District Provides Services-Put mobile wifi on buses	Mobile WIFI on buses	District works with a provider or cons
	SYSTEMS->Connectivity	CONNECTIVITY-District Provides Services-Provide "drive-in" wifi	Drive-In WIFI	District works with a provider or cons
			Knowing which students lack home Internet access and/or a dedicated learning device enables LEAs to:	
			<ul style="list-style-type: none"> Understand the impact that lack of home digital access has on learning outcomes Identify and call out the digital access gap as an educational equity issue Target resources to students in need of digital access Determine the most effective Internet connectivity solutions, making sure to engage with local community 	
	SYSTEMS->Connectivity	CONNECTIVITY-Collect data-CCSSO- Home Digital Access Data Collection: (SIS questions)	and business leadership for input and implementation of solutions	https://ccsso.org/sites/default/files/2019-09/CCSSO_Home_Digital_Access_Data_Collection_SIS_questions.pdf
			Gain leverage when seeking funding to help close the gaps	
	SYSTEMS->Connectivity	CONNECTIVITY-Advocate-LEGISLATURE and LOCAL	Contact legislatures, municipalities, townships and bring awareness of the data. Try to band together at a county level (such as SEMCOG-Southeast Michigan Council of Governors, Michigan Associations of Regions (MAR)).	http://www.miregions.com/ https://www.michigantownships.org/
	SYSTEMS->Connectivity	CONNECTIVITY-Advocate-PROFESSIONAL ORGANIZATIONS	Utilizes groups such as METL, MSBO CTO, SHELBY (School Health Care and Broadband Coalition) and COSN to bring awareness and collaboration	https://www.shlb.org/

Community Connectivity - Template

Description

Designed for educators who want to learn more about the Michigan eLibrary, MeL's EduPaths courses provide information about the eResources and support for the integration of MeL content into curriculum planning and instruction.



[Learn More](#)

Selection Considerations

Rate each category based on the current state of the district. Rating is based on a five point scale, with 5 being great and 1 poor. Click the wedges in the hexagon to learn more about each segment.

Evidence: ☐ 1 ☐ 2 ☒ 3 ☐ 4 ☐ 5

Usability: ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Supports: ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Need: ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Fit: ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

Capacity: ☐ 1 ☐ 2 ☐ 3 ☒ 4 ☐ 5

[Include in Strategy Implementation Plan](#)

Community Connectivity - Template

Strategy Details

Strategy Description

Designed for educators who want to learn more about the Michigan eLibrary, MeL's EduPaths courses provide information about the eResources and support for the integration of MeL content into curriculum planning and instruction.

Who owns this strategy implementation?

Nick Morse

When will it start?

10/26/2021



When will it be complete?

11/01/2021



What building(s) in the district does this apply to? *



Search



Select All Active

- ☒ Community Transition Campus
- ☐ Kent Education Center--Beltline
- ☐ Kent Education Center--Oakleigh
- ☐ Kent ISD Deaf and Hard of Hearing
- ☐ Lincoln Developmental Center

Community Connectivity - Template

Strategy Communication

How will the plan be communicated?

- ☐ Brochure
- ☒ District Website Update
- ☒ Email Campaign
- ☐ Local Newspaper
- ☐ MI School Data
- ☒ Parent Newsletter
- ☐ Presentations
- ☒ School Board Meeting
- ☒ Social Media
- ☐ Other

Who will the plan be communicated to?

- ☐ Community-at-Large
- ☐ Educators
- ☒ Parents
- ☒ School Board
- ☒ Staff

Remove from Strategy Implementation Plan

Community Connectivity - Template

District MICIP Portfolio: All Active Buildings ▾

ACTIVE GOALS 1 MAINTENANCE GOALS 0 ARCHIVED GOALS 0 PORTFOLIO HISTORY

+ 20 percent more students by 2021 Contains 1 Strategy



We want to have 20% more students with high speed internet by the end of 2022.

Created Date: 10/25/2021 Target Completion Date: 11/01/2021

Monitor

Evaluate

Community Connectivity - Template

Monitor: 20 percent more students by 2021

Implementation

Strategy 1 of 1

1:1 Device Connectivity

Activity	Owner	Start Date	Due Date	Status
<input type="checkbox"/> Plan an open house	Nick Morse	10/26/2021	11/01/2021	Upcoming

Monitoring Tool

Impact

What progress are we making on the interim and end targets? What is the evidence?

Create Note

Date	Note	Author
Click the button to add your first note		

Interim Target Measures

Measures	Owner	Due Date	Status
----------	-------	----------	--------

Community Connectivity - Template

Evaluate Goal : 20 percent more students by 2021 

Challenge Statement

Edit

The district needs to help more families sign up for low cost programs.





[View District Data Story](#)

Measurable Goal

Edit

We want to have 20% more students with high speed internet by the end of 2022.

Interim Target Measures

Measures 	Owner 	Due Date 	Status 
<input type="checkbox"/> Have 1 open house that helps parents sign up for low cost internet.	Nick Morse	10/31/2021	Approaching

End Target Measures







Measures 	Owner 	Due Date 	Status 	
<input type="checkbox"/> Increase by 20% for District-level Data on Broadband to the Home (Local)		11/01/2021	Approaching	

Community Connectivity - Template

Whole Child Data Discovery

District Data Sets & Stories Explore district Data Sets & Stories created by the district.

Create Custom Data Set

Data Story Name 	Category 	Status 	Last Edited 	By 	
An assessment of off-campus connectivity fro...	Technology - Infrast...	In Portfolio	10/26/2021	Nick Morse	
test Copy	Arts	Data Story	01/04/2021	Stephanie Villalta	
test Copy 1	Arts	Data Story	03/15/2021	Stephanie Villalta	

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Technology Professionals and the Continuous Improvement (C.I.) Process

LEARNING TARGETS:

- WHY should technology representatives be at the table from the start
- HOW/WHAT of the CI process and MICIP for Technology Planning



Bringing the Voice of Technology Leaders into the Continuous Improvement Process

Q & A

- How involved are Technology Leaders in the CI process in your district?
- What can share with MDE & Technology Leaders regarding the CI Mindset, Process, and Platform to promote awareness and use (and make your life easier)?
- Do your Technology Leaders have the capacity to be involved in the CI process?



Bringing the Voice of Technology Leaders into the Continuous Improvement Process