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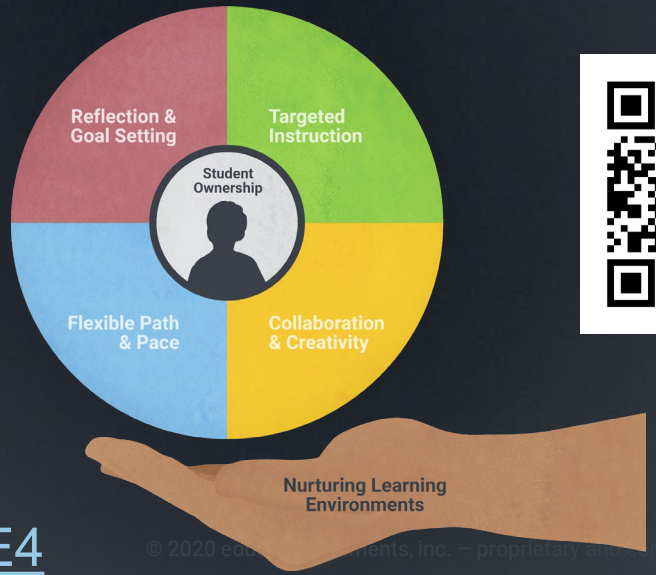
Learning Technology Grant

Core Four

Enhancing Tier 1 Instruction & Learning

March 14, 2025

Waterloo Central School District



https://bit.ly/WCSDPLCORE4

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Learning Technology Grant: Why this work matters

Our vision for this program is to create an engaging learning environment in all WCSD classrooms that integrates learning technology in instructional programs that supports student success.

Targeted Needs:

1. Improve student academic achievement, particularly among economically-disadvantaged students.
2. Improve instruction through comprehensive professional development and mentorship in personalized learning and learning technology.

Project activities will focus on teacher development and mentoring and increasing the use of personalized learning pathways for students to foster greater success.

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Learning Technology Grant Goals: Sequential Approach

1.Define professional development needs of staff around instructional technology and personalized learning.

2.Increase professional development for staff to ensure greater use and access to instructional technology and personalized learning programs and concepts.

3.Identify criteria for mentors and pool of potential mentors

4.Develop instructional technology mentors across the district

5.Develop personalized learning mentors across the district

6.Increase the use of personalized learning pathways for students to foster greater success with standards proficiency.

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Grant Timeline

Phase I – Spring 2025

- Needs Assessment Administration
- Develop PD Calendar for 25
- Provide PD
- ID Mentor Criteria
- ID possible Mentors
- Hire Mentors

Phase II – 2025-26 SY

- Develop PD Calendar for 25-26
- Develop Mentor Training
- Train Mentors
- Provide ongoing PD
- Mentors develop asynchronous PD courses
- Support learning walks
- Assess and plan for 26-27

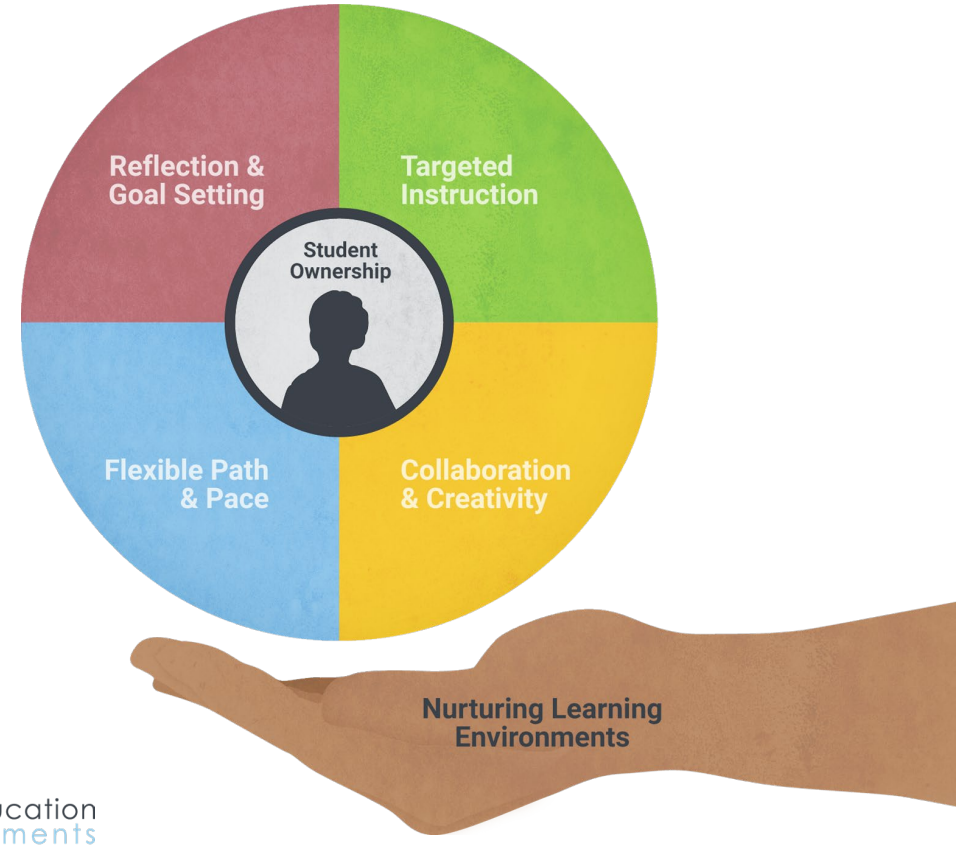
Phase III – 2026-27 SY

- Continue Mentor work
- Continue PD for staff
- Assess grant work progress and plan for continued support into 27-28 and beyond

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Let's share our stories and experience



Tell us how one or two of these areas were successful in your classroom.

What about it went well?

What did you learn from this?

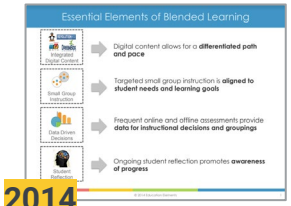
How does this still "live" today?

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The Evolution of the Core Four

Elements of Blended Learning

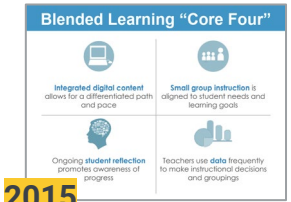


2014

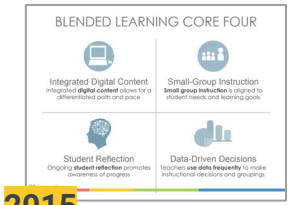


2014

Blended Learning Core Four

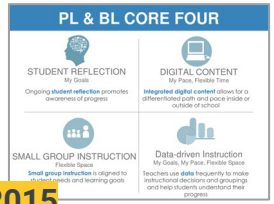


2015

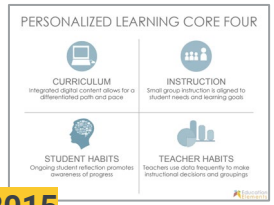


2015

Personalized Learning Core Four

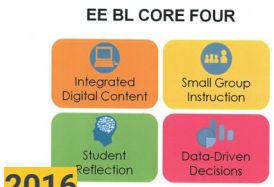


2015

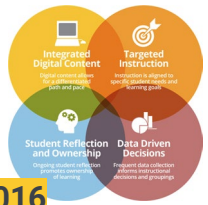


2015

Core Four Elements in Color



2016



2016

Core Four Elements as Petals



2016



2017

Core Four of Personalizing Learning



2021

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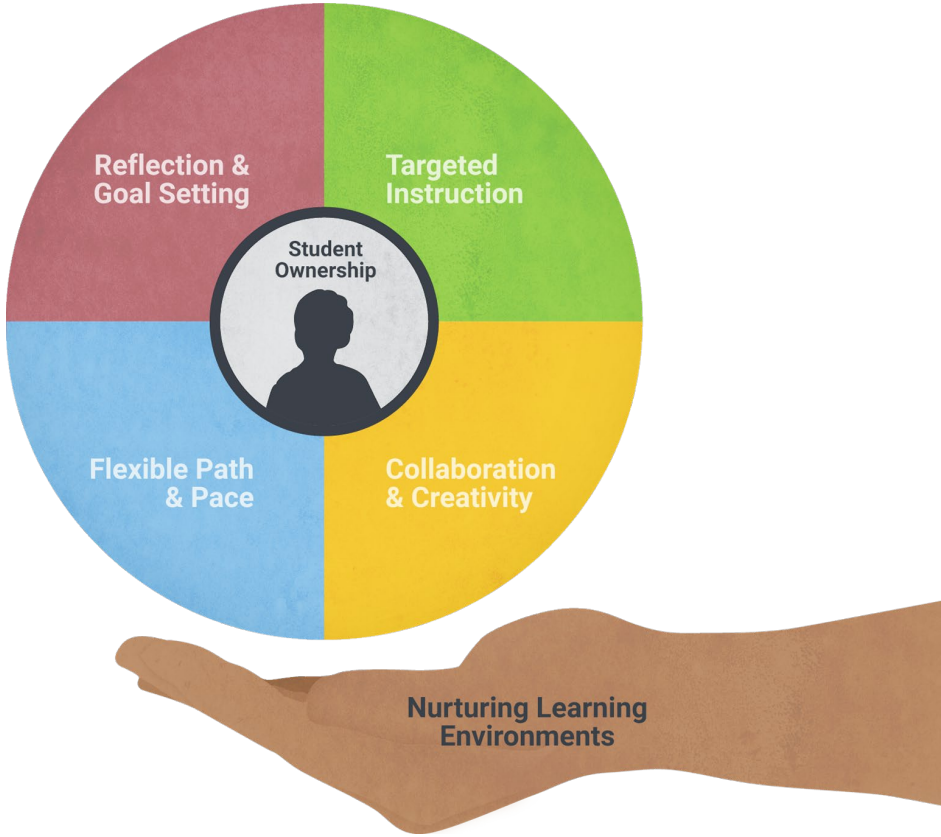
The Core Four of Personalizing Learning

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The NEW Core Four of PL

- Student ownership is the goal
- Nurturing learning environments are essential
- Four updated components



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What is personalized learning?



Instructional approach that empowers students to build ownership of their learning. It is a student-centered approach to learning that calls on educators to be responsive to the needs of their students, ensuring they get the instruction they need, when they need it.

What about this definition is resonating with you?

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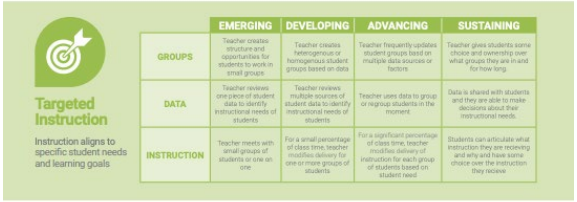
The Goal is Student Ownership

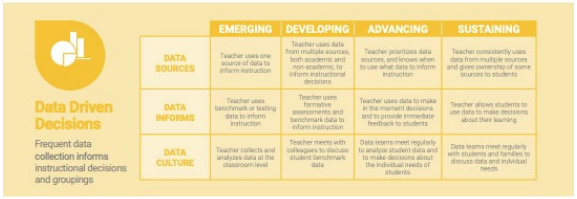


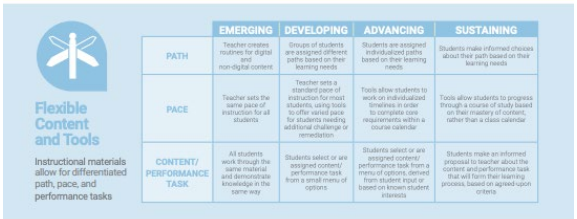
- Builds self-awareness
- Empowers students to advocate for themselves and their community
- Develops self-management
- Inspires them to become lifelong learners

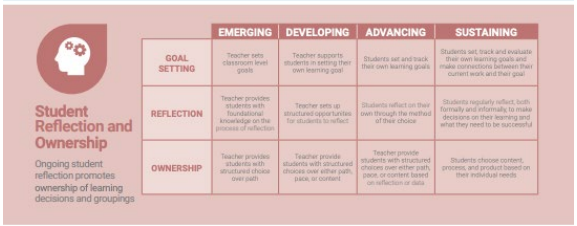
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	Emerging	Developing	Advancing	Sustaining
Reflection and Goal Setting	Teacher sets classroom-level goals. Teacher provides students with foundational knowledge on the process of reflection.	Teacher supports students in setting their own learning goals Teacher sets-up structured opportunities for students to reflect.	Students set and track their own learning goals Students reflect on their learning progress through the method of their choice.	Students set, track and reflect on their own learning goals and make connections between the choices they make in class and their goal.
Targeted Instruction	Teacher creates structured opportunities for students to work in small groups, meeting with students individually or in small groups	Teacher reviews data sources to create heterogeneous or homogeneous groups, and modifies instruction to better meet the needs of those groups for a small percentage of class time.	Teacher uses real-time data to make in-the-moment adjustments to instruction, so that students spend a larger percentage of class time having instruction tailored to their strengths, needs, or learning preferences.	Students can articulate what instruction they are receiving and why, and have some choice over the instruction they recieve.
Collaboration & Creativity	Students spend most of their time working independently. Students are exposed to novel ideas and solutions by the teacher or in teacher-selected resources.	Students have small structured opportunities to work in pairs or small groups. (turn + talk, small group conversations) Students make connections in order to generate new ideas and solutions.	Students work in groups to accomplish a task with individual roles that are assigned by the teacher Students can articulate how their novel ideas and solutions are meaningful to them and/or their community.	Students work in groups to accomplish a task and are given autonomy to establish roles and norms. Students generate novel ideas and solutions to complex problems or prompts independently of the teacher and without prompting.
Flexible Path and Pace	Teacher provides one opportunity for flexibility in path or pace.	Teacher provides more than one opportunity for flexibility in path or pace.	Teacher supports students in choosing the path and pace that best meets their learning needs.	Students are able to choose their path and pace as they work through material.

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Data Driven Decisions

Frequent data collection informs instructional decisions and groupings

	EMERGING	DEVELOPING	ADVANCING	SUSTAINING
DATA SOURCES	Teacher reviews student data from online sources such as digital tools and apps in addition to offline multiple measures data	Teacher uses data from multiple sources (both online and offline) to inform instructional decisions	Teacher frequently compares online and offline data to inform instructional decisions.	Teacher consistently uses data from multiple sources (both online and offline) to inform instructional decisions for individual students
DATA INFORMS	Teacher uses formative assessments to check for student understanding	Teacher can identify the most important sources of data for student mastery and uses it to plan for a portion of learning	Teacher uses formative assessments and benchmarks to inform instructional decisions	Teacher uses formative assessments on a daily basis to inform instruction; Teacher uses data to provide immediate feedback to students; teacher and students consistently review data together to identify needs and teacher adjusts instruction accordingly
DATA CULTURE	Teacher meets with colleagues to review student data	Teacher meets frequently with colleagues to discuss and review student data	Teacher shares data with students on a periodic basis; students review their data individually	Data teams meet regularly to analyze student data and to make decisions about the individual needs of students

Collaboration & Creativity	Students spend most of their time working independently. Students are exposed to novel ideas and solutions by the teacher or in teacher-selected resources.	Students have small structured opportunities to work in pairs or small groups. (turn + talk, small group conversations) Students make connections in order to generate new ideas and solutions.	Students work in groups to accomplish a task with individual roles that are assigned by the teacher Students can articulate how their novel ideas and solutions are meaningful to them and/or their community.	Students work in groups to accomplish a task and are given autonomy to establish roles and norms. Students generate novel ideas and solutions to complex problems or prompts independently of the teacher and without prompting.

Student Reflection and Ownership

Ongoing student reflection promotes ownership

	EMERGING	DEVELOPING	ADVANCING	SUSTAINING
GOAL SETTING	Teacher supports students in setting their own simple learning goal	Students begin to set their own learning goals	Students consistently set, track, and evaluate their own learning goals. Students continuously reflect on their own data and academic performance to boost growth	Students consistently set, track, and evaluate their own learning goals; student goals direct student activities. Teacher meets with students on a frequent basis to provide mentorship and support
REFLECTION	Teacher provides students with foundational knowledge on the process of reflection	Students use a tracker to monitor their own data and use simple means to reflect on their learning	Students monitor their own data and reflect on their learning in a variety of ways (journal, blog, share with a partner, etc.)	Teacher monitors student reflections on their learning and meets with students on a frequent basis to provide mentorship and support. Teacher works with students to reflect on their progress over time
OWNERSHIP	Teacher provides students with some form of choice with the content	Teacher provides students with choice in the process-prioritization of tasks or path to complete assignments	Teacher provides students with more authentic and autonomous choices with the content and process	Teacher allows authentic and autonomous choice with the content, process and product

	Emerging	Developing	Advancing	Sustaining
Reflection and Goal Setting	Teacher sets classroom-level goals. Teacher provides students with foundational knowledge on the process of reflection.	Teacher supports students in setting their own learning goals Teacher sets-up structured opportunities for students to reflect.	Students set and track their own learning goals Students reflect on their learning progress through the method of their choice.	Students set, track and reflect on their own learning goals and make connections between the choices they make in class and their goal.

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THE CORE FOUR - Overview

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ENHANCING TIER 1 INSTRUCTION AND LEARNING

An effective instructional approach empowers students to take ownership of their learning by ensuring instruction is responsive to their individual needs. Educators achieve this by targeting instruction, fostering collaboration and creativity, facilitating reflection and goal-setting, and designing flexible learning experiences. This is an active and ongoing process that places students at the center of their learning, requiring educators to be adaptive and intentional in their support. When students receive the right instruction at the right time, they become more engaged, successful, and better prepared for college and careers.

The Core Four is Education Element's research-informed framework for understanding the practices, mindsets, knowledge, and priorities that equip educators to shift towards experiences that build every student's ownership of their learning.

Targeted Instruction	Collaboration and Creativity	Flexible Path and Pace	Reflection and Goal Setting
Targeted instruction means that students can articulate what instruction they are receiving and why, and students have some choice over the instruction they receive based on their data, passions, and preferences.	*Personalizing learning encourages students to work with one another, share ideas, create new solutions and projects, provide one another with feedback, and, in the process, learn more about themselves.*	*Students learn in different ways and to truly personalize the learning experience, there must be opportunities for students to progress towards mastery of their learning through flexible learning pathways and at different paces.*	*Student reflection and goal setting are practices that can build a bridge for students between the content they are learning and why they are learning it.*

Reflection and Goal Setting

Reflection builds the self-awareness that can make goal-setting truly meaningful.



Targeted Instruction

At its most actualized, students can articulate what instruction they are receiving and why





Flexible Path and Pace

The design of the learning experience ensures students get what they need when they need it.



Collaboration and Creativity

Discussing ideas, meaning, and problems sparks creativity and inspires novel ideas.



Core 4 Alignment Activity



Student Reflection & Goal Setting



Student reflection and goal setting are practices that can build a bridge for students between the content they are learning and why they are learning it. **While these are two separate practices, they can, and should be interconnected** in the classroom. Reflecting on what we know and how we learn builds self-awareness that can make goal-setting a truly meaningful experience.

Student Reflection & Goal Setting



4. Reflection & Goal Setting: Social Studies - Community Helpers

Grade Level: 2nd Grade
Objective: Students will learn about different community helpers and their roles.

Materials Needed:

- Pictures and descriptions of community helpers
- Chart paper and markers
- Reflection journals

Lesson Steps:

1. **Introduction (10 minutes):**
   - Show pictures and discuss the roles of various community helpers.
   - Ask students to share what they know about community helpers.
2. **Interactive Activity (20 minutes):**
   - Students work in pairs to match pictures of community helpers with their descriptions.
   - Create a class chart of community helpers and their roles.
3. **Reflection & Goal Setting (15 minutes):**
   - Students write in their reflection journals about what they learned.
   - They set a goal related to learning more about a specific community helper.
4. **Sharing (5 minutes):**
   - Students share their reflections and goals with the class.

4. Reflection & Goal Setting: Health - Personal Wellness Plan

Grade Level: 8th Grade
Objective: Students will create a personal wellness plan to improve their physical and mental health.

Materials Needed:

- Wellness plan templates
- Research materials (books, internet access)
- Reflection journals

Lesson Steps:

1. **Introduction (10 minutes):**
   - Discuss the components of a personal wellness plan (nutrition, exercise, mental health).
   - Provide examples of wellness plans.
2. **Research & Planning (20 minutes):**
   - Students research different aspects of wellness and set personal goals.
   - They use the template to create their own wellness plan.
3. **Sharing & Feedback (15 minutes):**
   - Students share their wellness plans with a partner and provide feedback.
   - Encourage constructive and supportive feedback.
4. **Reflection (5 minutes):**
   - Students reflect on their wellness goals and how they plan to achieve them.

Targeted Instruction



At its most actualized, targeted instruction means that **students can articulate what instruction they are receiving and why**, and students have some choice over the instruction they recieve based on their data, passions, and preferences.

In earlier versions of our work, we separated data driven decisions and targeted instruction but we know that **these two elements go hand-in-hand** to help teachers and students design learning experiences tailored for individuals and groups of students.

Targeted Instruction



1. Targeted Instruction: Math - Fractions

Grade Level: 4th Grade
Objective: Students will understand and compare fractions.

Materials Needed:

- Fraction circles or bars
- Worksheets with fraction problems
- Interactive whiteboard

Lesson Steps:

1. **Introduction (10 minutes):**
    - Use the interactive whiteboard to review basic fraction concepts.
    - Demonstrate how to compare fractions using fraction circles.
2. **Guided Practice (15 minutes):**
    - Divide students into small groups based on their understanding of fractions.
    - Provide targeted instruction to each group, using fraction circles and worksheets tailored to their level.
3. **Independent Practice (15 minutes):**
    - Students complete fraction comparison problems on their own.
    - Teacher circulates to provide individual support as needed.
4. **Reflection (5 minutes):**
    - Students reflect on what they learned and set a goal for their next math lesson.

1. Targeted Instruction: Algebra - Solving Quadratic Equations

Grade Level: 9th Grade
Objective: Students will learn to solve quadratic equations using different methods.

Materials Needed:

- Algebra textbooks
- Graphing calculators
- Worksheets with quadratic equations

Lesson Steps:

1. **Introduction (10 minutes):**
    - Review the different methods for solving quadratic equations (factoring, completing the square, quadratic formula).
    - Provide examples on the board.
2. **Guided Practice (15 minutes):**
    - Divide students into groups based on their understanding of quadratic equations.
    - Provide targeted instruction to each group, focusing on the method they need the most help with.
3. **Independent Practice (15 minutes):**
    - Students solve quadratic equations on their own, using the method they find most comfortable.
    - Teacher circulates to provide individual support as needed.
4. **Reflection (5 minutes):**
    - Students reflect on which method they found easiest and why.

Collaboration & Creativity



Personalizing learning encourages students to work with one another, share ideas, create new solutions and projects, provide one another with feedback, and, in the process, learn more about themselves. A major misconception about personalizing learning is that students work independently for the majority of the time. We believe that true personalization happens when students show up as their whole selves, including their values, emotions, and perspectives, and work with others to solve creative solutions to complex problems meaningful to them and their community.

Collaboration & Creativity



2. Collaboration & Creativity: Science - Ecosystems

Grade Level: 5th Grade
Objective: Students will create a model of an ecosystem.

Materials Needed:

- Art supplies (paper, markers, glue, etc.)
- Research materials (books, internet access)
- Presentation tools (poster board, digital presentation software)

Lesson Steps:

1. **Introduction (10 minutes):**
   - Discuss different types of ecosystems and their components.
   - Show examples of ecosystem models.
2. **Group Activity (30 minutes):**
   - Divide students into small groups.
   - Each group selects an ecosystem to research and create a model.
   - Encourage creativity in their models and presentations.
3. **Presentation (10 minutes):**
   - Groups present their ecosystem models to the class.
   - Classmates ask questions and provide feedback.
4. **Reflection (5 minutes):**
   - Students reflect on their collaboration and creativity during the project.

2. Collaboration & Creativity: History - Debating Historical Events

Grade Level: 10th Grade
Objective: Students will research and debate a historical event from multiple perspectives.

Materials Needed:

- Research materials (books, internet access)
- Debate guidelines and rubrics
- Presentation tools (poster board, digital presentation software)

Lesson Steps:

1. **Introduction (10 minutes):**
   - Introduce the historical event and provide background information.
   - Explain the format and rules of the debate.
2. **Group Activity (30 minutes):**
   - Divide students into groups, assigning each group a different perspective on the event.
   - Groups research their perspective and prepare arguments for the debate.
3. **Debate (20 minutes):**
   - Groups present their arguments and engage in a structured debate.
   - Encourage respectful discussion and critical thinking.
4. **Reflection (5 minutes):**
   - Students reflect on what they learned from the debate and how it changed their understanding of the event.

Flexible Path & Pace



Students learn in different ways and to truly personalize the learning experience, there must be opportunities for **students to progress towards mastery of their learning through flexible learning pathways at different paces**.

When increasing flexibility in student learning experiences, teachers can provide valuable tools so that students feel supported in this increased self-direction. This can help move students from superficial engagement or compliance into drivers of their own learning.

Flexible Path & Pace



3. Flexible Path & Pace: Language Arts - Reading Comprehension

Grade Level: 3rd Grade
Objective: Students will improve their reading comprehension skills.

Materials Needed:

- A variety of reading materials (books, articles, etc.)
- Reading comprehension worksheets
- Digital reading tools (tablets, e-readers)

Lesson Steps:

1. **Introduction (10 minutes):**
    - Discuss the importance of reading comprehension.
    - Introduce different reading materials available.
2. **Independent Reading (20 minutes):**
    - Students choose their reading material based on interest and reading level.
    - They read at their own pace and complete comprehension worksheets.
3. **Small Group Discussions (15 minutes):**
    - Students join small groups to discuss what they read.
    - Teacher facilitates discussions and provides additional support.
4. **Reflection (5 minutes):**
    - Students reflect on their reading experience and set goals for future reading.

3. Flexible Path & Pace: English - Independent Reading Project

Grade Level: 7th Grade
Objective: Students will choose a book to read independently and create a project based on their reading.

Materials Needed:

- A variety of books (classroom library, digital library)
- Project guidelines and rubrics
- Art supplies or digital tools for project creation

Lesson Steps:

1. **Introduction (10 minutes):**
    - Discuss the importance of independent reading and explain the project options (e.g., book report, creative presentation, digital project).
2. **Independent Reading (30 minutes):**
    - Students choose a book based on their interests and reading level.
    - They read at their own pace, taking notes for their project.
3. **Project Creation (20 minutes):**
    - Students work on their projects, using the guidelines provided.
    - Teacher provides support and feedback as needed.
4. **Reflection (5 minutes):**
    - Students reflect on their reading experience and the project they created.

Exploring the Core Four - Tactics Bank

Explore Curated Resources (10-15 minutes)

- Select **one or two Core Four areas** to focus on:
  - **Targeted Instruction**
  - **Collaboration & Creativity**
  - **Flexible Path & Pace**
  - **Reflection & Goal Setting**
- Use the **provided bank of articles, videos, and content** to explore strategies and insights.



https://bit.ly/WCSDPLCORE4

Tactics Bank Link

Exploring the Core Four - Tactics Bank

Explore Curated Resources (10-15 minutes)

- Select **one or two Core Four areas** to focus on:
  - **Targeted Instruction**
  - **Collaboration & Creativity**
  - **Flexible Path & Pace**
  - **Reflection & Goal Setting**
- Use the **provided bank of articles, videos, and content** to explore strategies and insights.

Guiding Reflection:

- What resonates with you from the resources?
- How does this practice empower student ownership of learning?
- What strategies do you already use? What might you try next?



Reflection Padlet:
https://bit.ly/C4PLreflect

Next Steps

THANK YOU!

- Needs assessment survey
- Spring 2025: Initial work begins
- Summer 2025: Mentor training & planning for 2025-26 school year

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