Agenda

- Welcome and Introductions
- Agenda Overview
- Know/Need to Know Activity
- Overview of New Tech Network
- Overview of Tech Valley High School
- Project Overviews
- Teacher/Student Panel
- Likes/Wonders Activity
- Wrap-up

New Tech Network

OUR WHY

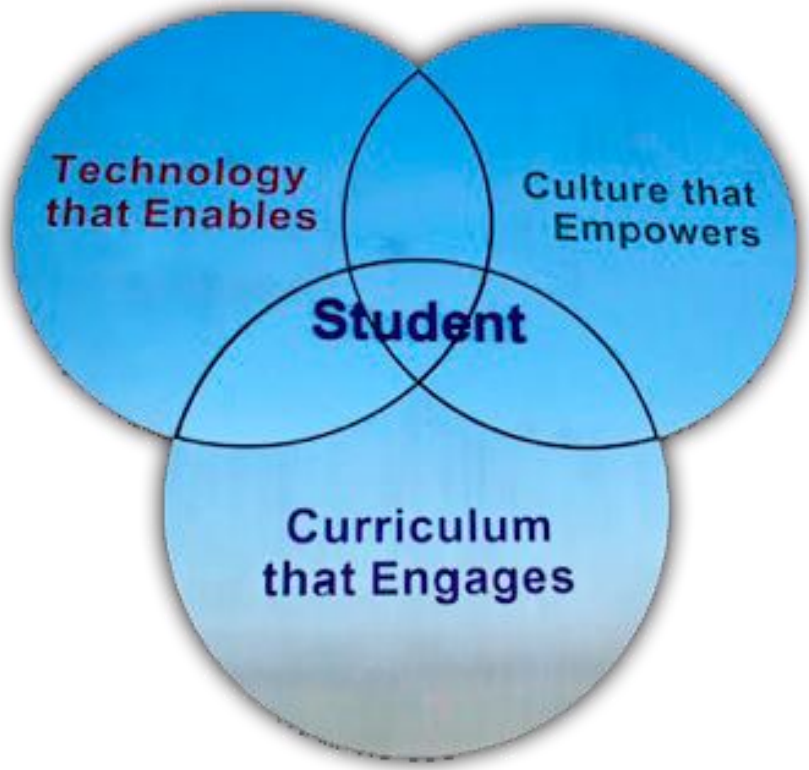
To ensure all students graduate with the **skills, knowledge, and attributes** they will need to **thrive** in **post-secondary education, careers, and civic life**.

OUR HOW

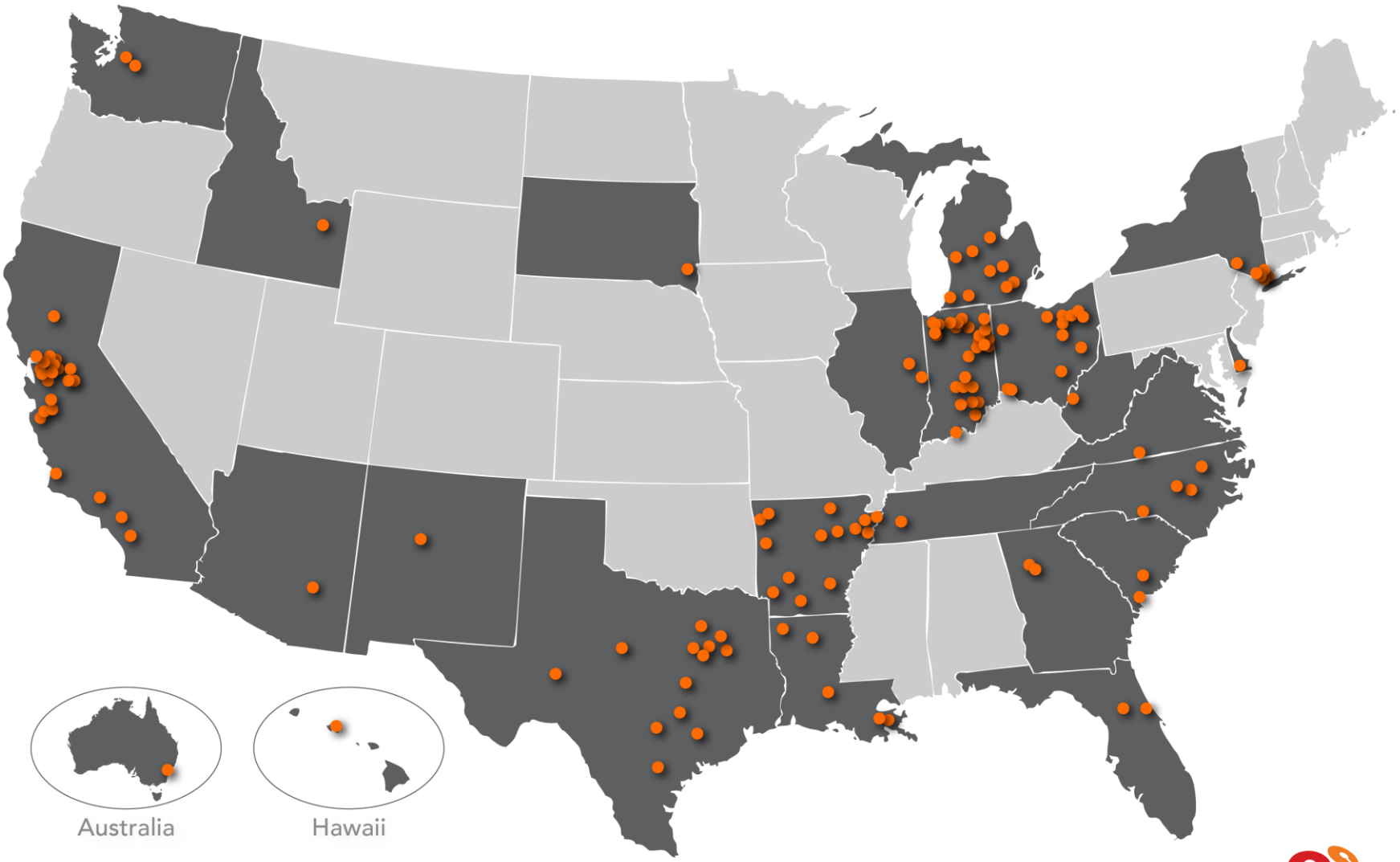
At its core, NTN builds the **human** and **organizational capacity** in school systems to **reimagine teaching and learning.**

OUR WHAT

We develop innovative **learning environments** built around a **culture** that empowers, **teaching** that engages, and **technology** that enables.



New Tech Network

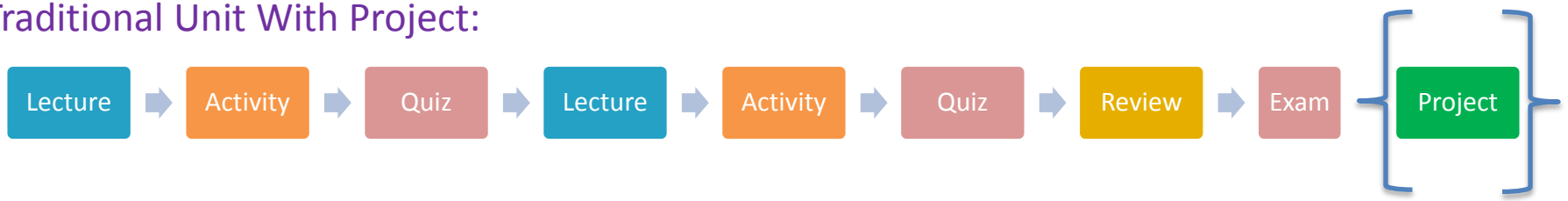


2 Countries • 23 States • 134 Schools • 2500 Teachers • 39000 Students

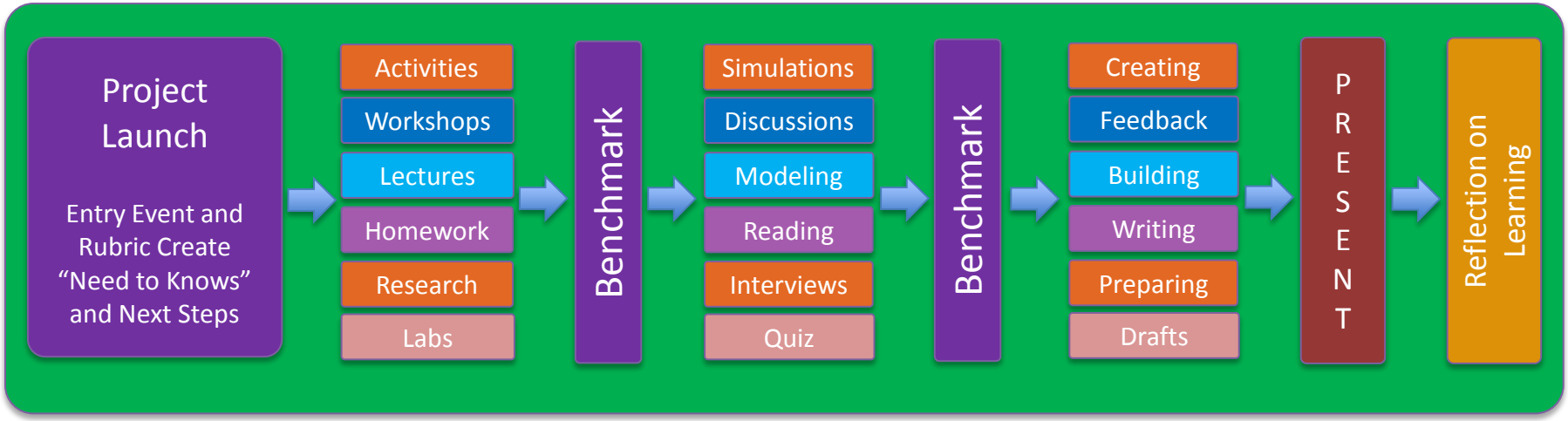
New Tech Network
A subsidiary of KnowledgeWorks

PBL is NOT the Same as "Doing Projects"

Traditional Unit With Project:



Project-Based Learning Unit:



What “College Ready” Means to NTN

	Aware	Each student understands post-secondary options and sees the importance of college and its role in career options and other life choices
+	**Eligible**	Each student completes requirements necessary for college entrance
+	**Prepared**	The student graduates from high school with the skills and dispositions necessary for further education without remediation
=	**College Ready**	

Our thanks to Duane Baker at the BERC Group for this formulation

New Tech Network
School-Wide Learning Outcomes

Five research-based indicators of post-secondary success. These are to be assessed and scaffolded throughout a project based learning unit.

Agency

Collaboration

Oral Communication

College Ready Assessment and Literacy Task

College Ready Tasks are disciplinary tasks within a project that elicit all of the rubric indicators on the *Knowledge and Written Communication* rubrics. **Literacy Tasks** may elicit specific, targeted, but not necessarily all of the *Knowledge and Thinking* and *Written Communication* indicators.

Knowledge and Thinking

Written Communication

The NTN Profile of a Graduate…

THINK
critically

COMMUNICATE
effectively

WORK
collaboratively

AGENCY
how to learn...

…through mastery of rigorous academic content

Collaboration. Innovation. Success.

Capital Region BOCES
ALBANY • SCHOHARIE • SCHENECTADY • SARATOGA

QUEST R III
PUTTING STUDENTS FIRST

Reimagining Education

- Innovate public education and serve as model
- Develop dynamic partnerships
  - Relevant, authentic, rigorous
- Create culture of doers
- Inspire students in STEM practices
- Create learner-centered environment
- Integrate curriculum

THE CNSE CHILDREN'S MUSEUM of Science and Technology

SUNY College of Nanoscale Science and Engineering

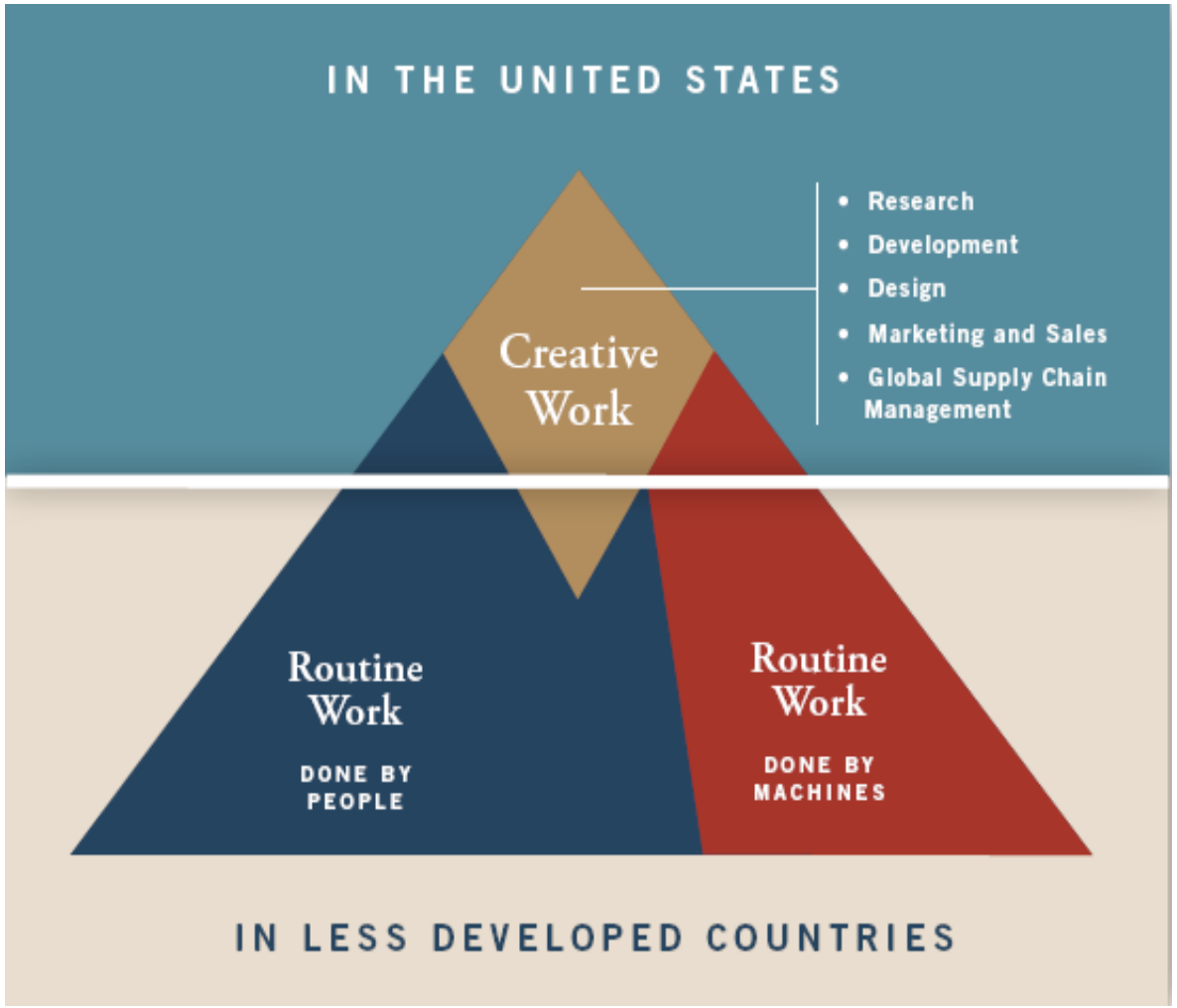
EYP/ Architecture & Engineering

New Tech Network

TechValley High School

GLOBAL COMPETITION: requires a different kind of education.

In order for America to compete globally and secure its future, US workers must develop a high level of creativity and innovation that requires a new approach to education.



Tough Choices or Tough Times
National Commission on Education and the Economy

“New” skills are:

- Critical thinking & Problem solving
- Collaboration
- Agility & Adaptability
- Initiative & Entrepreneurship
- Effective communication (oral & written)
- Accessing & analyzing information
- Curiosity & Imagination

Ready for College, Career and Civic Life

Skills	Knowledge	Attributes
Collaboration	History	Persistence
Critical thinking	Biology	Resilience
Communication	Chemistry	Patience
Creativity	Physics	Self-worth
Problem solving	Math	Confidence
Technology	Literacy	Adaptability
Literacy	Economics	Curiosity
Numeracy	Government	Flexibility
Researching	Culture	Risk taking
Time management	Current events	Responsibility

TechValley HIGH SCHOOL

Tech Valley High School

- Regional public high school located at SUNY College of Nanoscale Science and Engineering
- Small school by design
- 46 school districts, seven counties
- Diverse student body
- Member of national network of New Tech schools

Mission

Tech Valley High School provides a unique and innovative **student-centered** educational opportunity, engages students in current **emerging technologies, and supports the growth and economy of the region.**

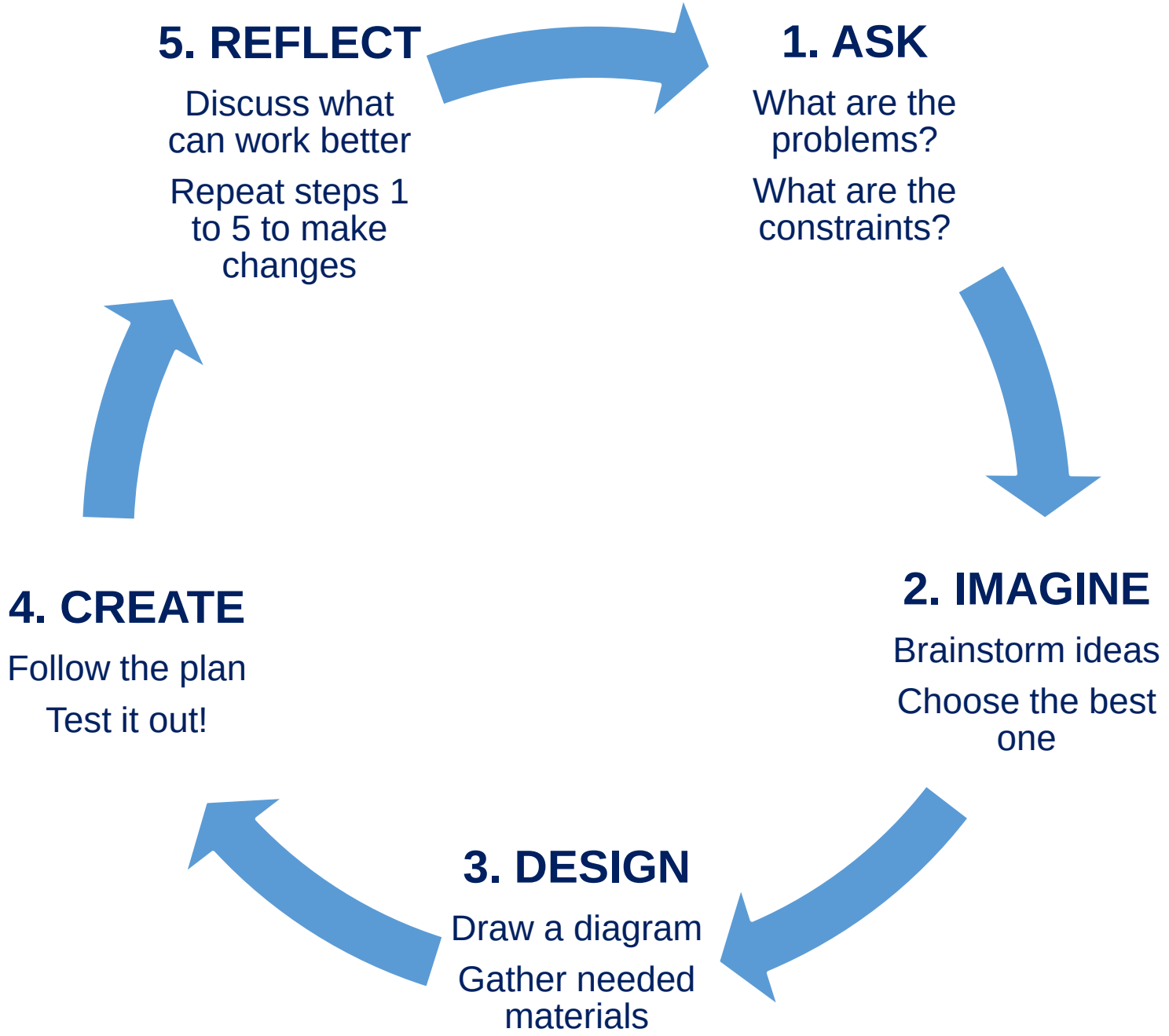
Learner-centered Environment

- Take risks in a cutting-edge, innovative lab environment
- Develop personal responsibility and ownership
- Build communication skills and self-confidence
- Present and defend work
- Give and receive feedback

Project-based Learning

- Engaged through authentic real-world challenges
- Enabled by technology
- Empowered by professional collaborative culture
  - Trust
  - Respect
  - Responsibility

The Engineering Design Process



Biotechnology Fall'13 1st Period | Leah Penniman & Diana Weldon

Agendas | Projects | Gradebook | Activities

Term: Semester1

Agenda
Monday | Dec 9, 2013

Welcome to the Pixie Project!

Please sit with you **new teams**.

Project **Entry Event**

- **Know Need to Know** Process - **Entry Document**, **Rubric**
- Create team folder named (Pixie Team X, Name, Name...) and share/notify teachers (include all team docs in folder)
- Write **team contract**
- Write **team pacing chart** - divide project into benchmarks, assign dates for each benchmark

Possible workshop - as requested in know/need to know

Individual Time

- Work on **Cornell Notes**. Thorough answers are expected. Address all parts of the question. Homeostasis quiz tomorrow based on first question in Cornell Notes.
- Continue pull outs for oral communication exam and stem cell project assessment

Dismissal at 11:30 AM this morning due to 1-hour delay schedule.

TechValley HIGH SCHOOL


Knowing & Thinking ELA 30% (1 activity | 20 pts possible)
84%
Collaboration 10% (5 activities | 45 pts possible)
83%
Technology & Information 10% (1 activity | 20 pts possible)
82%
Knowing & Thinking History 30% (5 activities | 70 pts possible)
78%
Agency & Self Direction 10% (6 activities | 30 pts possible)
78%
Communication 10% (2 activities | 30 pts possible)
77%

Project Example: How can we design and build a low cost microscope?

Project Example: How can we use the design process to translate music into a visual form?

Tech Valley High Program

- NYS graduation requirements
- NYS learning standards and exams
- College credit
- Online courses
- Four years of math and science
- Multiple pathways for career and college interests
- Career exploration and field work
- Advisory
  - Teacher and peer mentoring

Additional TVHS Graduation Requirements

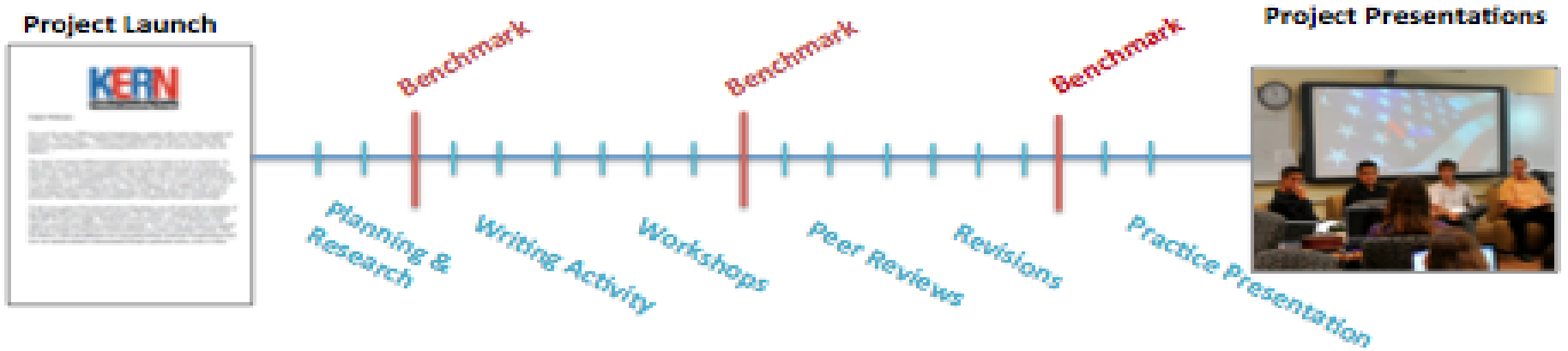
- J-Term/Senior project
- Digital portfolio
- Community service

Results

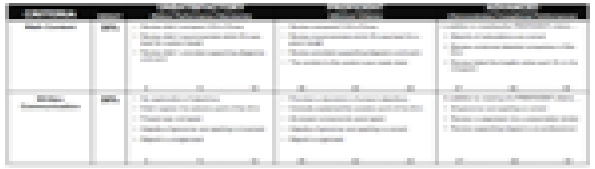
- Meets NYS graduation requirements
  - NYS learning standards
  - Regents exams
- Goes above and beyond
  - CWRA
  - Youth Truth
- 100% on-time graduation rate
- 100% graduation acceptance rate
- 93% enrolled in college
- Nearly 50% pursuing STEM

TechValley HIGH SCHOOL

Project Based Learning Timeline



Rubric



FACILITATOR: a **"guide on the side"** who provides coaching and mentoring, a support person who troubleshoots and problem solves *when students need help*

QUESTIONS?

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TechValley HIGH SCHOOL

QUESTAR III
PUTTING STUDENTS FIRST