

Education & Training

A Note on Teamwork and Presentations to Further Connect WRS to the Activity:

- Identify the competency or unit in your program that would be most appropriate for teaching this activity synchronously. Students learn best in context.
- Divide the class into competitive teams (at least two).
- Have the teams brainstorm ideas and establish rules for brainstorming: all ideas are accepted.
- Have teams arrive at consensus and choose their best idea to propose.
- Teams should establish norms, roles, and expectations for team members.
- Teams will clearly define their mission and the idea of their proposals.
- The teacher should act as the judge of the quality and feasibility of the ideas.
- Teacher should also provide enough background to get students started and monitor student behavior along the way, providing helpful feedback when necessary.
- Students should share work and reflect on how well the team worked together.

Resources

https://www.forbes.com/sites/bernardmarr/2022/02/18/the-five-biggest-education-andtraining-technology-trends-in-2022/?sh=3d90c5d22f4d

Scenario

Education and training is one of the most costly enterprises in business and industry. Corporations dedicate vast resources to ensure their workforce is strong, effective, proficient, and creative. The thought is, if employers can increase productivity of labor, reduce errors and waste, and help them stay out of legal trouble, these assets will drive profitability. If the cost to education and training to improve the workforce outweighs the perception of its effectiveness, then resources allocated to education and training will be reduced.

But beyond the needs of industry, there will always exist the responsibilities to have an educated citizenry. It is valued simply because we wish to pursue our curiosity and improve the human condition. This is why governments pour resources into education, to provide the ladders for individual careers to support the economy, but also to improve society as a whole. Education as a value will never go away.



Yet there are mighty forces and changes that will impact the way we seek and provide training and education. These trends represent changes in the media and technology as well as the way we are changing our thinking about education and training and access to it.

You will use the following list to research your topic and present your findings, proposing adoption and widespread implementation to the class of one of these trends. Students may add trends not listed on the list provided. Your presentation must also address the following components:

- Identify and explain the trend in a way that others will understand.
- Present the problem the trend tries to mitigate, solve, or make more efficient.
- Describe additional benefits of joining the trend, beyond the primary problem. Could it replace a current, more accepted practice or technology? If so, which?
- Discuss the viability or other practical considerations for trend's adoption, including acceptance by culture, political climate, and cost. In other words, is it possible? In which environment is the solution best suited? Which audience or type of consumer or business will benefit the most?
- Connect your proposal to the first five WRS, using some of the process questions listed under each WRS in the following sections, or use some of your own. You do not need to address all questions.

Choose from one of the following trends in Education & Training.

The list below comes from: Forbes

- 1. Remote learning
- 2. Lifelong learning (subscription services)
- 3. Immersive learning technology AR and VR
- 4. AI and automation in the classroom
- 5. Nano-learning

Note: Teachers, divide your class into teams of at least two students each to cover the following topics. You may first ask students to divide themselves, based on interest or career path, but try to assign all the topics or as many as you feel would be worthy of their time.

WRS Connection



Each of the following Workplace Readiness Skills with their definitions is followed by a series of process questions that students may pull from and answer to include within their presentations.

1. Creativity and Innovation—We define creativity and innovation as:

- Discussing the importance of creativity and innovation in the workplace
- Brainstorming and contributing ideas, strategies, and solutions
- Developing and/or improving products, services, or processes
- Identifying and allocating available resources.

Process Questions

- a) Sometimes, creative ideas represent a disruption or change to the same pattern or way of doing things. In what way does your trend disrupt or change a current way of thinking?
- b) When deciding how to start your presentation, what was your creative process?
- c) How is your trend an innovation?
- d) How might you change this idea to make it even more innovative?
- e) How might you make your trend into a more widespread accepted practice?
- f) How do you define or summarize your idea (frame your idea as a very short story or pitch to persuade investment)?
- g) With your trend, what is improved: a product, a service, or a process?
- h) What resources are needed to help scale your trend: time, people, technology, funding?
- i) There are two ways of seeing and thinking about the future: pessimistically and optimistically. How is optimism particularly creative in nature?
- 2. Critical Thinking and Problem Solving—We define critical thinking and problem solving as:
 - Recognizing and analyzing problems
 - Evaluating potential solutions and resources
 - Using a logical approach to make decisions and solve problems
 - Implementing effective courses of action.

Process Questions

- a) What problem is your trend trying to solve? Define it clearly.
- b) What is affected by the solution (implementing your trend)? What are the possible impacts?
- c) Are there secondary benefits or consequences to embracing your trend?



- d) Is your trend feasible on a widespread scale? How does it make practical and logical sense?
- e) Thus far, how far along is your trend's acceptance? How would you evaluate its progress? What does it still lack or need to grow?

3. Initiative and Self-Direction—We define initiative and self-direction as:

- recognizing the importance of proactive, independent, decision-making
- identifying workplace needs
- completing tasks with minimal direct supervision
- applying solutions.

Process Questions

- a) If you felt there was something in your trend that would benefit your employer, company, or school, to whom would you first propose it?
- b) What would be the steps you might follow to propose the solution?
- c) Could you implement this solution alone and inspire others to imitate you?
- d) What do you do presently that falls within this trend?
- e) Which types of businesses might benefit most from implementing this solution or innovation? Is this best for corporations, start-ups, or public/private individual educators?
- f) What are your perceived barriers for pursuing this trend and implementing its solution?

4. Integrity—We define integrity as:

- recognizing the importance of having integrity in the workplace
- complying with local, state, and federal laws
- adhering to workplace policies and procedures
- exhibiting honesty, fairness, and respect toward self, others, and property.

Process Questions

- a) Are there policies and regulations governing the implementation of your trend/solution? If so, what are your biggest hurdles?
- b) Education and training require honest evaluation of a program's effectiveness. In your chosen Education & Training career path, what are some outcomes you would anticipate, and how might the solution in your trend help you to achieve them?
- c) Do you think your trend, if implemented, would warrant new legislation? How does it improve access and equity?



- d) How do you, in the way you frame your argument for your trend's solution, account for persistent problems or deficiencies in Education & Training?
- e) In what ways does your argument support or counter public policy?
- f) Did you present your trend honestly? Does your presentation represent the drawbacks as well as the benefits?
- g) Have you fairly presented any problems that may be a part of your solution, such as cost and access?
- h) How does advocating for access and equity in Education & Training represent integrity?
- 5. Work Ethic—We define work ethic as:
 - demonstrating diligence (e.g., working with persistence to accomplish a task)
 - maintaining dependability (e.g., being reliable)
 - accounting for one's decisions and actions
 - accepting the consequences of decisions and actions.

Process Questions

- a) How would your trend's solution help with persistently delivering high quality education and training?
- b) What setbacks are you likely to encounter when trying to have your trend accepted or implemented? What can you do to stay the course?
- c) How did you show resilience and drive and a positive mindset as you worked with persistence to create a good presentation?
- d) How might your trend positively impact work ethic?
- e) Finding meaning in what you do is a motivator. How can your trend's solution positively affect the world?
- f) For your presentation, did your team divide and accomplish tasks evenly? Or did someone do more work than another? How did this make you feel, and what does it have to do with work ethic?

We strongly encourage teacher feedback on these activities, if implemented, as well as success stories and examples of your completed work. Reviews may be sent to Darren Morris, Instructional Designer, CTECS, <u>dmorris@ctecs.org</u>.

For teachers who wish to expand the activity into a larger project, the following PBL Design Principles and Teaching Practices are provided



PBL Project Design Principles

- 1. **A Challenging Problem or Question:** The project is framed by a meaningful problem to be solved or a question to answer, at the appropriate level of challenge
- 2. **Sustained Inquiry:** Students engage in a rigorous, extended process of posing questions, finding resources, and applying information.
- 3. Authenticity: The project involves real-world context, tasks and tools, quality standards, or impact, or the project speaks to personal concerns, interests, and issues in the students' lives.
- 4. **Student Voice & Choice:** Students make some decisions about the project, including how they work and what they create, and express their own ideas in their own voice.
- 5. **Reflection:** Students and teachers reflect on the learning, the effectiveness of their inquiry and project activities, the quality of student work, and obstacles that arise and strategies for overcoming them.
- **6. Critique & Revision:** Students give, receive, and apply feedback to improve their process and products.
- 7. **Public Product:** Students make their project work public by sharing it with and explaining or presenting it to people beyond the classroom.

PBL Teaching Practices

- 1. **Design & Plan:** Teachers create or adapt a project for their context and students, and plan its implementation from launch to culmination while allowing for some degree of student voice and choice.
- 2. Align to Standards: Teachers use standards to plan the project and make sure it addresses key knowledge and understanding from subject areas to be included.
- 3. **Build the Culture:** Teachers explicitly and implicitly promote student independence and growth, open-ended inquiry, team spirit, and attention to quality.
- 4. **Manage Activities:** Teachers work with students to organize tasks and schedules, set checkpoints and deadlines, find and use resources, create products and make them public.
- 5. **Scaffold Student Learning:** Teachers employ a variety of lessons, tools, and instructional strategies to support all students in reaching project goals.
- 6. **Assess Student Learning:** Teachers use formative and summative assessments of knowledge, understanding, and success skills, and include self and peer assessment of team and individual work.
- 7. **Engage & Coach:** Teachers engage in learning and creating alongside students, and identify when they need skill-building, redirection, encouragement, and celebration.

