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Healthcare Team PBL Project Packet

EDUCATOR'S GUIDE

Created in collaboration with:









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PBL Introduction & Primer



Introduction

Welcome to Project Based Learning! This Educator's Guide will introduce you to Project Based Learning (PBL) and provide you with steps and tips to successfully implement the Healthcare Team PBL Project. Let's start!

What is Project Based Learning?

PBL is a way of teaching that involves students learning through real-world, meaningful, and engaging projects. Gold Standard Project Based Learning includes several elements (PBLworks, n.d.):



Challenging Problem



Sustained Inquiry



Authenticity >

Student Voice & Choice >

Reflection Critique & Revision >Public Product

In the Project Implementation Guide & Resources section, we'll touch on how each of these standards are fulfilled in the Healthcare Team PBL Project.

PBL Introduction & Primer

How is it different from a class project? The key difference between PBL and a class project is that PBL is the vehicle in which students learn the curriculum and content. In other words, the learning takes place during the PBL project, and the standards, segments, or competencies are embedded in the project. On the other hand, class projects are "dessert projects" that happen at the end of the learning. Class projects, also called wrap-up or summarizing projects, are projects where students demonstrate the content and the competencies they have already learned.

Differences Between Class Projects and PBL

Class Projects	Project Based Learning (PBL)
 Teachers guide the project instructions and outline Teachers determine the final "product" Teachers assess student work, typically at the end of the project 	 Focuses on authentic and real-world reflective activities and questions as the foundation Builds student choice and voice: students guide the project from design to inquiry to how they answer the project objective or Driving Question Offers timely feedback: student assessment and feedback can occur during the process and can incorporate self and peer assessment Focuses on connecting to community partners as a vital component of the project

PBL Introduction & Primer

What are the benefits of teaching through PBL? PBL engages students through real-world and meaningful questions, problems, or situations. This kind of authentic learning teaches students skills that will help them be successful in the real world. Students can learn career and personal skills like:

- 1. Adaptability and perseverance in navigating challenges, roadblocks, or complex tasks
- 2. Communicating professionally with different audiences or communicating to resolve disagreements
- 3. Critical and creative thinking in analyzing and solving problems

Teaching through a PBL unit may require a longer time to teach and move through the unit, but as a tradeoff, you can enjoy:

- 1. Connecting and covering multiple competencies
- 2. Fewer worksheets, tests, and less direct instruction
- 3. Multiple opportunities for student assessment
- 4. The ability to add on additional lesson plans to ensure student success

What are the benefits to teachers implementing PBL?



Overview of Healthcare Team PBL Project

As with all Gold Standard PBL projects, the project begins with a challenging question that the health career and technical education (CTE) students seek to answer. The driving question behind the Healthcare Team PBL Project is, *"Can your team solve the patient mystery?"*

To answer the driving question, students are split into healthcare teams, where each student assumes the role of a healthcare professional (ex. physician, medical assistant, medical records, pharmacist, etc.). As a group, they are assigned a "patient" with a disease and must work with their team to diagnose, treat, and discharge their patient.

Through the process of diagnosing, treating, and discharging their patient, students will gain exposure to teams of healthcare workers while meeting 51.0000 competencies.

Implementing the Healthcare Team PBL Project

Let's go through some steps and tips to successfully implement the Healthcare Team PBL Project.



Jump to Section:

- 01 Who Is Needed for the PBL?
- 02 Adapt the Design & Plan the Unit
- 03 How PBL Teaches Curriculum Competencies
- 04 Building a Classroom PBL Culture
- 05 Helping Students Manage PBL Activities
- 06 <u>Scaffolding the PBL</u>
- 07 Assess Student Learning
- 08 Engage & Coach Students

Who Is Needed for the PBL?

 <u>Click here for the summary</u> of who is needed for the PBL project and an outline of their roles and responsibilities.



Contact the Michigan Health Council team at <u>mhc.org/contact</u> if you need support connecting with local healthcare professionals!

Adapt the Design & Plan the Unit

Ensure you adapt the project to fit your community's context and think about how to implement the project from beginning to end.

Adapting the Project

To help ensure success and real-world applicability for your students and community's needs, modify the healthcare professionals and patient diagnoses accordingly. For example, if your community has limited physician access, you could swap out the profession for a physician assistant. Or, instead of a physical or occupational therapist, you could have an athletic trainer. Be creative with the <u>patient's diagnoses</u> to match the content of the healthcare classroom. For example, a first-year health class may require a less involved diagnosis.



Tip: Consider connecting with multiple employers / organizations to ensure you have access to all the healthcare professionals needed for the project.

Planning PBL Project Implementation	>	The <u>Project Calendar</u> is a roadmap for implementing the PBL unit over each of the three weeks. It includes pre-planning, template documents, project milestones and suggested project pacing.
Planning Classroom Management	>	Just because PBL is student-led doesn't mean that the classroom needs to be chaotic and full of overwhelming activity. Planning classroom management strategies ahead of time can help ensure that students stay on task and can work productively during class-time. For tips on classroom management during PBL projects, check out this <u>blog article</u> (Spencer, 2021).
How PBL Teaches Curriculum Competencies	>	PBL projects are designed so that students can only move forward to the next stage of the project by showing an understanding and mastery of certain skills and competencies. For example, only once students can apply their understanding of disease and human structure can they correctly diagnose their patient and move on to discussing appropriate treatments.

How PBL Teaches Curriculum Competencies (continued) Here are some of the 51.0000 competencies that students meet through the Healthcare Team PBL Project:

A8 - Describe and follow legal and ethical boundaries in healthcare delivery
A9 - Describe and follow ethical practice as it applies to healthcare delivery
B1 - Employ communication strategies used in the delivery of quality healthcare
B2 - Describe and actively practice team member participation
C1 - Utilize knowledge of human structure and function to conduct healthcare role
C2 - Utilize knowledge of diseases and disorders to conduct healthcare role
C7 - Display behaviors and practices that meet the expectations for employment in healthcare professions
C8 - Communicate with patients and colleagues using appropriate medical technology

But why use a PBL project to teach competencies in the first place?

The authentic and challenging nature of PBL projects requires students to learn and apply 21st century skills that set them up for academic and professional success (Baird, 2019). Through the demands and challenges of PBL projects, students gain a deeper understanding of the content, and are more motivated to learn as they can see how what they are learning applies to real-life situations (Buck Institute for Education, 2013).

<u>Check out this article</u> for more information on how PBL projects teach students "21st Century Skills" (Baird, 2019).

Tip: You can adapt the framework of the Healthcare Team PBL project to incorporate additional competencies as appropriate. Remember that some competencies don't fit well into a PBL framework, such as competencies that improve with repetitions or that require a lot of direct instruction.

Building a Classroom PBL Culture

- > As an educator, you are responsible for building the culture around PBL. Intentionally providing ways or opportunities for students to become familiar and comfortable with PBL will help ensure their success throughout the journey. You may find it useful to:
 - Prepare students for team collaboration
 - Co-build classroom PBL norms
 - Create a physical space that facilitates collaboration

Helping Students Manage PBL Activities

Because students have more autonomy during PBL, you will need to work with the students to develop project management skills. Use the <u>Project Calendar</u> as an example timeline for the activities and milestones that students should reach.

You may also choose to monitor or review the <u>team</u> <u>meeting notes</u> to ensure that students are on track. Students may also choose to schedule meetings with you to ask questions.



Tip:

It's also helpful to have students regularly refer back to the Driving Question, **"Can your team solve the patient mystery?"** to ground their activities and remind them of the final goal they are working towards.

Scaffolding the PBL	>	As we covered earlier, most of the student learning will take place through the process of completing the PBL project as opposed to stand-alone lessons. While you may feel the need to teach skills upfront, it's important for students to face challenges and struggles that they work through on their own. These struggles are part of what makes a PBL project authentic and is how students build 21st Century skills and learn to apply them in a real-world setting.
Teaching Interview Skills	>	 However, to make the most of the project and the time ahead of the healthcare professional team, it's highly recommended to teach strong interview skills ahead of the healthcare panel interviews. Ensuring students are prepared with meaningful questions for the healthcare panel interview will: Help students have all the information they need to properly perform their healthcare role Respect and make the most of the time that the healthcare professionals are sharing with the students
		Refer to the <u>Interview PowerPoint</u> as a resource to help teach students how to conduct a quality interview.
Teaching Additional Skills	>	In addition to teaching interview skills, some other topics that you might find useful to teach are: • Research skills • Professional communication skills • How to perform a Grand Rounds Presentation

Assess Student Learning

Unlike traditional projects, students show their competencies and skills during the course of the PBL project. This allows the opportunity for educators to assess students throughout the project. The Healthcare Team PBL project meets the following 51.0000 competencies:

A8 - Describe and follow legal and ethical boundaries in healthcare delivery

A9 - Describe and follow ethical practice as it applies to healthcare delivery

B1 - Employ communication strategies used in the delivery of quality healthcare

B2 - Describe and actively practice team member participation

C1 - Utilize knowledge of human structure and function to conduct healthcare role

C2 - Utilize knowledge of diseases and disorders to conduct healthcare role

C7 - Display behaviors and practices that meet the expectations for employment in healthcare professions
C8 - Communicate with patients and colleagues using appropriate medical technology

Refer to the <u>Template Single Point Rubric</u> for an example competencies assessment.





Student Self-Assessment & Reflection





You may also choose to have students participate in reflective self-assessments. Having students intentionally reflect on their experience during the PBL allows them to process and make meaning out of their learning. Highquality student self-assessments allow students to reflect on:

The Content

What are students learning and how does it deepen their understanding or connect to a concept?

The Process

How are students learning and are their strategies, project management, and group collaboration efforts are effective in helping them answer the Driving Question?

The Purpose

Why are students doing this, how are the daily tasks helping them to answer the Driving Question, and ultimately, why and how could the experience of the PBL unit be helpful in a real-world work environment?

The Learner

How has the PBL unit challenged students to grow and change as individuals and leaders to better meet their personal goals?

Engage & Coach Students

- The PBL format provides educators with the opportunity to take on a coaching role and work with students to answer the Driving Question together. As a coach, some of the activities you may want to consider are:
 - Creating an exciting hook to spark curiosity and engagement in students
 - Reading the room to understand when students need help or encouragement
 - Bringing excitement and momentum back to the project
 - Celebrating the small and large wins and accomplishments of students

<u>Check out this video</u> on engaging and coaching to learn more (Buck Institute for Education, 2020)!

Reference List:

Baird, M. (2019). 21st century skills and digital citizenship: Project based learning to develop 21st century competencies. In *Technology and the curriculum: summer 2019*. Pressbooks. [eBook]. https://pressbooks.pub/techandcurr2019/chapter/pbl-competencies/

Buck Institute for Education. (2013). *Research summary: PBL and 21st century competencies*. Buck Institute for Education. [PDF]. https://pblworks.org/sites/default/files/2019-01/FreeBIE_Research_Summary.pdf?_ga=2.171626720.1593476999.1704377813-1133805450.1704377813

Buck Institute for Education. (2020). *Project based teaching practices: Engage & coach.* [Video]. YouTube. https://youtu.be/PiFq6lybAQQ?feature=shared

Spencer, J. (2021). *How to be proactive about classroom management in PBL*. John Spencer. [Web page]. https://spencerauthor.com/pbl-classroom-management/

PBLworks. (n.d.). *Gold-standard PBL: Essential project design elements*. Buck Institute for Education. [Web page]. https://www.pblworks.org/what-is-pbl/gold-standard-project-design



What is Project Based Learning (PBL)?

Project Based Learning (PBL) teaches students learning through real-world, meaningful, and engaging projects. Different from classroom projects, where students summarize what they have already learned, students gain skills and competencies as they work through their PBL project.

Want to learn more? Check out this video (Spencer, 2018).

What Are the Benefits of PBL for Students?

Students learn career and personal skills like:

- Adaptability and perseverance
- Professional communication skills
- Critical and creative thinking skills

What Are the Benefits of PBL for Community Participants?

PBL projects don't just benefit students - community partners, such as yourselves, benefit by:

- 1. Modeling the professional and personal skills needed to be successful in healthcare
- 2. Connecting you and your organization with potential future employees
- 3. Giving you an opportunity to give back to your local community
- 4. Creating a fun experience for employees, especially those with "behind the scenes" jobs
- 5. Bringing awareness to more health professions

What is the Healthcare Team PBL Project?

Project Overview

In groups, health career and technical education (CTE) students will roleplay a healthcare team and work together to diagnose, treat, and discharge a "patient". Just like in real life, each student will have a medical role that they need to perform in order for the whole team to work successfully to care for their patient.

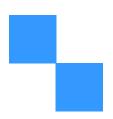
During the project, students will be exposed to different healthcare careers while learning:

- Communication strategies used in the delivery of quality healthcare
- Active team member participation
- How to utilize knowledge of human structure and function to conduct a healthcare role
- How to communicate with patients and colleagues using appropriate medical terminology
- How to apply legal and ethical practices to healthcare delivery
- How to demonstrate the behaviors and expectations for employment in healthcare



Roles & Expectations of Healthcare Professionals

As a volunteer healthcare professional assisting in this project, your first goal is to support and enhance the learning of the student participants. You will serve as the professional link to these students and the careers they are exploring, which they may be learning about for the first time through this project. Your real-world, lived experience will be vital to provide context to student actions and help them connect project elements to real-life job responsibilities.



PBL Educator's Guide



Preparing to Participate



The project begins with an open, interview-style discussion between the students and the healthcare professionals. The students will prepare questions in advance about various elements of your roles in healthcare.

Throughout the project, students will connect with you as professionals to ask questions regarding their project work. You will work with the educator to determine what method of communication is most convenient for you. Some potential options include email or phone calls.

The project concludes with a series of Grand Rounds-Style Presentations where the students share their project findings with the healthcare professional team.

Preparing for the Interview

The interview to open the project allows students to ask questions about your role in healthcare. This has the twofold benefit of both helping them be successful in this project and also allowing them to learn more about in-demand careers in healthcare. No advance preparation is needed on the part of the professional besides showing up ready to share the passion you have for your work. When thinking about what elements of your job to share, consider what soft skills (teamwork, communication, etc.) are important for success in your work. These are great elements to share with students if the opportunity arises.

Tip: Have fun! Students will feed off of your energy during the interview and throughout the project and will be more invested if they can tell you are taking it seriously and enjoying yourself.

Preparing to Participate

Connecting with Students

Students will reach out during the project to ask questions of the healthcare professionals. When responding, treating the students as you would a professional colleague will help the project feel authentic and give the students valuable, realworld work experience. You should feel empowered to question or challenge the students' decisions throughout the project. This will force them to really think about why they have made specific choices.

Preparing for Student Presentations

The final piece of the project gives student participants the opportunity to present their overall findings to the healthcare professional team. Again, no advance preparation is needed on the part of the professionals besides being ready to share the passion for your work and to ask questions after student presentations. As the students share details regarding how the project went, try to relate elements to your real-life work when possible. This will help the students connect pieces of the project to potential future careers.

Reference

Spencer, J. (2018). What is project based learning? [Video]. YouTube. https://youtu.be/crMM4z3oKmQ?feature=shared



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