

Lesson 1

Digital Mirror: How Social Media Shapes Our Reflection



Objectives

Students will:

- Understand the project-based learning (PBL) approach and the design thinking process as frameworks for problem-solving.
- Explore the guiding question, “How does social media influence the way we see ourselves and others?”
- Identify key themes related to social media’s impact on mental health.
- Brainstorm initial project ideas and establish learning expectations for the unit.

Skills for the Future

- Empathy
- Critical Thinking
- Collaboration
- Communication

Project Word Wall

- Social Media Algorithms
- Misinformation
- Digital Well-Being
- Quantitative
- Qualitative

Resources

General

- [Teacher Resource Guide](#)
- [Lesson 1 teacher presentation](#)
- [Student portfolio](#)
- Whiteboard
- Posterboard or digital board (such as [Padlet](#) or [Mentimeter](#))
- PBL and design thinking resources (In Teacher Resource Guide)
- ETS Skills for the Future Venn diagram (In Teacher Resource Guide)

Videos

- Video 1: [Project Based Learning: Explained.](#) (3:49)
- Video 2: [The Design Thinking Process](#) (3:56)
- Video 3: [Great design starts with empathy](#) (7:39)

Lesson Plan Summary: The Five Es

Engage: Think–Pair–Share [\(Go to section\)](#)

1. Think–Pair–Share ([Teacher Resource Guide](#)):
 - Prompt: How has social media impacted the way you see yourself or others?
2. Class Discussion:
 - Facilitate a brief discussion that highlights student responses and connects them to the Essential Question.

Explore: Introducing PBL and Design Thinking [\(Go to section\)](#)

1. Watch the videos.
 - [Project Based Learning: Explained.](#)
 - [The Design Thinking Process](#)
2. Have students discuss in pairs.
3. Highlight key takeaways.

Explain: Explaining the Overarching Topic [\(Go to section\)](#)

1. Gallery Walk: Post four key questions around the room (or on a Padlet).
 - How does social media shape our emotions and mental well-being?
 - What's the double-edged sword of social media? How can it both lift us up and tear us down?
 - Who wins and who loses in the social media game?
 - What would “healthy” social media look like, and how could we make it a reality?
2. Debrief in a whole-class discussion.

Elaborate: Looking Ahead at Unit Objectives and Expectations [\(Go to section\)](#)

1. Scoping the Project
 - Project goals
 - Focus on skill for the future
 - Creative career skills
 - Portfolio development
2. Class Discussions
 - Display the ETS Skills for the Future Venn diagram (See the Teacher Resource Guide, Slide 46).

Evaluate: Reflection and Idea Generation Exit Ticket [\(Go to section\)](#)

1. Watch and Reflect
 - [Great design starts with empathy](#)
2. Exit Ticket (Choose 1)
 - What role does empathy play in creative careers?
 - Why do you think empathy is an important skill for this project?

Introduction

Think about the last time you scrolled through social media. Did it leave you feeling inspired, connected, or perhaps a bit insecure? Social media is a powerful tool that shapes our self-perception and influences our emotions, perceptions, and behaviors. While it can foster connection and creativity, research indicates it may also contribute to mental health challenges. For instance, a study highlighted by Yale Medicine notes that adolescents spending over 3 hours daily on social media face twice the risk of experiencing depression and anxiety symptoms ([Yale Medicine, 2024](#)). Additionally, a Pew Research Center survey revealed that 43% of teens feel pressure to post content that makes them look good to others, underscoring the impact of comparison culture ([Pew Research Center, 2018](#)).

In this lesson, we'll explore social media's complex impact on mental health using project-based learning (PBL) and design thinking, two creative problem-solving approaches. You'll examine key themes, including self-esteem, comparison culture, and misinformation, while also recognizing the positive aspects of social media, such as advocacy and community building. By the end of this lesson, you'll have a deeper understanding of social media's influence and a plan to turn your insights into action. Let's jump in!

Standards and Practices

Common Core Standards: Grades 9–10

- **L.9–10.6:** Acquire and use academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level.
- **SL.9–10.1:** Initiate and participate effectively in a range of collaborative discussions, building on others' ideas and expressing their own clearly.
- **L.9–10.6:** Acquire and use academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level.
- **SL.9–10.1:** Initiate and participate effectively in discussions, building on others' ideas and expressing their own.

Common Core Standards: Grades 11–12

- **L.11–12.6:** Acquire and use academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level.
- **SL.11–12.1:** Initiate and participate effectively in a range of collaborative discussions, building on others' ideas and expressing their own clearly.
- **L.11–12.6:** Acquire and use academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level.
- **SL.11–12.6:** Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when appropriate.

Next Generation Science Standards

- **HS-ETS1-1:** Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions.

International Society for Technology in Education

- **Knowledge Constructor (3a, 3b, 3c, 3d):** Students plan and employ effective research strategies to locate information and other resources.

Teacher Preparation

Preparation

Differentiation Strategies for Grades 9–12

High school students bring diverse levels of experience with digital tools, iterative design, and peer feedback. Use the strategies at the end of this lesson plan to manage cognitive load, scaffold learning, and increase engagement during prototyping.

About Lesson Structure and Pacing

Each lesson in this unit is organized using the **5E model—Engage, Explore, Explain, Elaborate, and Evaluate**—a research-based framework that encourages inquiry, collaboration, and meaningful reflection. While initially developed for science education, this model translates seamlessly to project-based learning, guiding students through a cycle of curiosity, investigation, creativity, and revision.

To support implementation, we've included teacher scripts for each step of the 5Es. These scripts provide helpful context, model language, and classroom guidance while leaving space for your own voice and facilitation style.

You'll also find suggested times for each activity within the lesson. These are not fixed durations but rather planning tools to help you anticipate lesson flow. We have intentionally not assigned a total time for the full lesson, as each classroom is unique, and the PBL process is flexible.

Some classes may need more time to unpack a complex issue, dive deeper into research, or experiment with prototypes. Others may move more quickly through reflection or brainstorming. We encourage you to adjust the pacing to fit your students' needs, allowing them the time and space to think critically, collaborate meaningfully, and bring their ideas to life.

Student Portfolio Setup

A student portfolio will serve as a centralized workspace for tracking learning, reflections, and project development. Choose a format that aligns with school-approved technology and student accessibility.

Portfolio Format Options

- Digital: Google Slides or Microsoft PowerPoint
- Analog: Printed portfolio binders with designated sections for research, brainstorming, and reflections

Portfolio Management

- **Student Portfolio Templates:** See the templates provided for the student portfolio. Choose the option that works best for your students ([Google Slides](#) or [Microsoft PowerPoint](#)).

- **Checkpoints:** Review the [Project-Based Learning \(PBL\) Assessment Rubric](#) and set a milestone deadline for students to share project progress with you.

Building Your Project Word Wall

The word wall serves as a living reference tool that grows with students throughout the unit. By incorporating key vocabulary, skills for the future, and essential concepts from each lesson, the word wall reinforces learning, builds academic language, and supports students in articulating their ideas with clarity and precision.

You can choose to create a physical wall in your classroom using chart paper or bulletin board space, or you can create a virtual word wall using a digital tool such as Padlet or Wakelet.

Before each lesson, review the word wall with the class and ask students to reflect on how they are applying these concepts and skills for the future in their research, discussions, and project development. By continually engaging with the word wall, students develop a shared language for collaboration and critical thinking, two essential components of effective teamwork and communication.

Note: You may prefer to review the project word wall with students at the beginning of the week to set the stage for what is to come.

Skills for the Future

This project also helps students develop skills for the future, a set of critical competencies identified by the ETS Research Institute as essential for success in the evolving world of work. As demographic changes, technological advancements, and globalization reshape the workforce, students will need not only strong cognitive skills but also behavioral and affective skills to thrive.

The skills identified by the Skills for the Future initiative include critical thinking, collaboration, communication, and adaptability, and are embedded throughout the project. Each lesson invites students to practice these competencies through collaborative problem-solving, creative design work, and evidence-based decision-making. By engaging with these real-world skills, students are preparing for academic success, lifelong learning, and career readiness in a rapidly changing world.

The vocabulary and skills for the future for the project word wall are listed at the end of each lesson, ensuring you and your students have ongoing opportunities to connect academic content, practical skills, and future-focused competencies.

In future lessons, please incorporate the project word wall into the lesson flow as you find appropriate. We will only add definitions for new vocabulary at the end of each lesson, allowing you to continually build on existing terms.

Essential Question: How does social media shape identity and mental health?

Engage (10 minutes) [\(Back to summary\)](#)

Think–Pair–Share

Teacher Script: *Before we dive into this project, I want us to take a moment to reflect on our personal experiences with social media. Have you ever found yourself comparing your life to what you see online? Do*

social media platforms make you feel more connected, or do they sometimes make you feel isolated? Today, we begin our journey by exploring how social media shapes the way we see ourselves and others.

1. Share the prompt: How has social media impacted the way you see yourself or others?
2. Provide students time to think and individually jot down their thoughts in their student portfolios.
3. Pair students so that they may discuss their thoughts with a partner and find common themes.
4. Have each pair share by summarizing their discussion for the class. Capture key themes (e.g., comparison culture, self-esteem, misinformation, social validation) on the board or a digital whiteboard (e.g., Padlet or Mentimeter).
5. Facilitate a short discussion that highlights student responses and connects them to the broader Essential Question: How does social media shape identity and mental health?

[Explore \(15 minutes\)](#) ([Back to summary](#))

Introducing PBL and Design Thinking

Teacher Script: *Now that we've started thinking about how social media influences us, let's talk about how we will approach this topic throughout the unit. Instead of just reading about these ideas, we will use a method called project-based learning, or PBL, combined with design thinking, to research, analyze, and develop real-world solutions. Let's watch two short videos that introduce these concepts.*

1. Watch and discuss the videos as a whole class or in small groups.
 - Video 1: [Project Based Learning: Explained](#) (3:49)
 - Video 2: [The Design Thinking Process](#) (3:56)
2. Discussion questions (have students discuss in pairs or small groups, before sharing with the class):
 - What stood out to you about PBL and design thinking?
 - How do these methods help us tackle real-world problems?
 - How do empathy, creativity, and iteration play a role in designing solutions?
3. Summarize key takeaways on the board or on a digital display. Share PBL and design thinking resource documents with students as you discuss the following:
 - PBL is learning by doing. Students will research, create, test, and present a project that addresses social media's influence.
 - Design thinking is a user-centered approach that starts with empathy and ends with a tested, refined solution.
 - The process is iterative and has a real-world impact. Students will test and improve their work over time.

Explain (15 minutes) [\(Back to summary\)](#)

Exploring the Overarching Topic

Teacher Script: *We've now explored the process we'll use for this project, but what exactly will we be investigating? Social media is a powerful tool—it connects us, informs us, and entertains us. But it also has challenges. We will explore multiple perspectives on this topic through a collaborative activity.*

Gallery Walk (digital or analog)

1. Post four key questions around the room (or in a Padlet).
2. Have students rotate through the questions in small groups of three to four and add their thoughts on sticky notes or post them to a digital board.
3. Use the following questions to guide this activity, as needed.

Gallery Walk Questions to Consider

A. How does social media shape our emotions and mental well-being?

Teacher tip: *If students get stuck and need additional prompts to support their discussion, use the following brainstorm prompts:*

- i. Does scrolling make you feel more connected or more alone?
- ii. Have you ever logged off feeling better or worse, and why?
- iii. How do different platforms (Instagram, TikTok, Snapchat, etc.) affect your mood in different ways?

B. What's the double-edged sword of social media? How can it both lift us up and tear us down?

Brainstorm prompts, if needed:

- i. When have you seen social media being used for good (e.g., mental health awareness, activism, support groups)?
- ii. What's an example of social media making things worse (e.g., misinformation, cyberbullying, toxic trends)?
- iii. Are some platforms "safer" for mental health than others, and why?

C. Who wins and who loses in the social media game?

Brainstorm prompts, if needed:

- i. Which groups of people are most vulnerable to social media's effects (e.g., teens, influencers, younger kids, marginalized communities)?
- ii. How does social media impact self-esteem differently for different people?
- iii. Do algorithms treat everyone the same, or do they amplify some voices while silencing others?

D. What would "healthy" social media look like, and how could we make it a reality?

Brainstorm prompts, if needed:

- i. What would happen if we redesigned social media to put mental health first?
- ii. If you had the power to change one thing about social media, what would it be?

- iii. How can we help people use social media in a way that protects their mental health rather than harming it?
4. Debrief in a discussion as a whole class.
 - Facilitate a discussion on emerging themes and patterns in student responses.
 - Present students with the big idea and goal: There are multiple perspectives on social media's impact—some positive, some negative. Their goal is to develop a thoughtful, research-based approach to understanding these effects and creating solutions.

Elaborate (5 minutes) [\(Back to summary\)](#)

Looking Ahead at Unit Objectives and Expectations

Teacher Script: *Now that we have started to think critically about social media's impact, let's shift our focus to the big picture—what we'll be working toward throughout this project. By the end of this unit, you will have developed a creative project that explores a real issue related to social media and mental health.*

1. Scope the project.

Display the following and discuss each topic area with students.

- Project Goals:
 - Develop, test, and present a product that addresses a social media-related issue.
 - Focus on Skill for the Future:
 - Empathy, critical thinking, collaboration, and communication
 - Creative Career Skills:
 - Use multimedia tools to create digital artifacts (videos, infographics, campaigns, etc.).
 - Portfolio Development:
 - Document the research and design process in a digital or physical portfolio.
 - Have students consider the following as they envision their final project:
 - A specific lens or issue (e.g., comparison culture, misinformation, or digital well-being).
 - A potential audience (e.g., peers, younger students, parents, or school staff).
 - A final project format (e.g., video, infographic, social media campaign, live presentation, etc.).
2. Facilitate a class discussion:
 - *What skills do you think will be most important for this project?*
 - Display the [ETS Skills for the Future Venn Diagram](#) and have students brainstorm, building on each other's ideas.

Evaluate (5 minutes) [\(Back to summary\)](#)

Reflection and Idea Generation Exit Ticket

Teacher Script: To wrap up today's lesson, I want you to take a moment to reflect on everything we've discussed so far. Social media affects each of us in different ways. What issue interests you the most? What would you like to explore in more depth?

1. Watch and reflect as a whole class or in small groups.
 - Play the video [Great design starts with empathy](#) (7:39).
 - Encourage students to watch the full video on their own if you don't have enough time during class to watch it together.
 - After the video, have students choose one question to answer for their exit ticket:
 - What role does empathy play in creative careers?
 - Why do you think empathy is an important skill for this project?

Exit Ticket Submission Options:

- Analog: Have students write their answers on a sticky note and place it on a class idea board.
- Digital: Have students submit their responses via Google Forms, Padlet, or a discussion post in Canvas.

Transition to Lesson 2: The Problem and Project Overview Team Formation

Teacher Script (as students are completing the exit ticket): In the next lesson, we'll dive deeper into the research process, exploring credible sources, surveys, and media analysis to understand social media's effects more thoroughly. Start thinking about how you want to approach your project!

Project Word Wall

Choose a format:

- **Physical:** Use chart paper or bulletin board space for a classroom display where students can add new terms.
- **Digital:** Set up a Padlet or collaborative Google Doc where students can add terms throughout the unit.

Introduce key vocabulary to establish a strong foundation for discussion and research. For example, have students define and discuss the following:

- **Social Media Algorithm:** A set of rules or calculations used by social media platforms to determine what content users see.
- **Misinformation:** False or misleading information that spreads online, intentionally or unintentionally.
- **Digital Well-Being:** The balance of technology use and personal health, ensuring that social media and digital interactions support mental and emotional well-being.
- **Quantitative:** Information that can be measured or counted using numbers, statistics, or mathematical calculations.

- **Qualitative:** Information that describes qualities, characteristics, or opinions that cannot easily be measured with numbers. Instead, it focuses on words, observations, and themes.

Ongoing Engagement and Class Norms

- Discuss why defining these terms matters in students' research and projects.
- Establish a class norm where students add new terms they encounter during discussion, research, or lessons.
- Encourage students to use word wall terms in their reflections, discussions, and final presentations to reinforce learning.

Integrate Skills for the Future

Prior to each lesson, add the skills for the future that students will develop, and encourage reflection on how they apply these skills in their project work.

- **Empathy:** The ability to understand and share the feelings, perspectives, and experiences of others.
- **Critical Thinking:** The ability to analyze and evaluate information to make objective and informed decisions.
- **Collaboration:** The ability to work harmoniously with others, leveraging diverse strengths and ideas to achieve common goals and contribute positively to team dynamics and outcomes.
- **Communication:** The ability to effectively exchange information, thoughts, and ideas with others in various environments (virtual and in-person) using various channels such as verbal, written, and non-verbal.

Differentiation Strategies for Grades 9–12 [\(Back to top\)](#)

Students across high school grades have varying levels of experience with **research**, **data analysis**, and **user-centered inquiry**. Use the following strategies to adjust cognitive load, scaffold learning, and encourage deeper engagement.

Grade 9: Building Foundational Skills

Cognitive Focus: Structured support, step-by-step guidance, and explicit modeling.

Objective: Help students develop foundational discussion skills and introduce PBL and design thinking in a way that feels accessible and engaging.

- **Scaffold the Quickwrite:** Provide sentence starters or structured prompts to help students articulate their thoughts.
- **Model the Think–Pair–Share Activity:** Before students engage, demonstrate the process by modeling a response, showing how to listen, ask follow-up questions, and summarize ideas effectively.
- **Offer a Guided Walkthrough of PBL and Design Thinking:** Use real-world examples to illustrate these frameworks in action, helping students understand their practical applications.

Grade 10: Strengthening Critical Thinking and Collaboration

Cognitive Focus: Encouraging students to make connections between previous knowledge and new concepts while fostering more independent thinking.

Objective: Deepen students' engagement by integrating prior experiences with digital literacy and refining their ability to take structured notes.

- **Encourage Prior Knowledge Connections:** Have students reflect on previous discussions about digital literacy or media influence to establish a foundation for inquiry.
- **Assign Peer Note-Taking Partners:** Pair students to key insights, ensuring they have clear takeaways for reflection and project application.

Grade 11: Deepening Research and Debate Skills

Cognitive Focus: Encouraging deeper comparative analysis, argumentation, and synthesis of multiple perspectives.

Objective: Foster a higher level of discourse by prompting students to debate, evaluate sources critically, and lead discussions.

- **Elevate the Quickwrite to a Research-Based Response:** Challenge students to connect their insights to previous coursework, requiring them to support their arguments with evidence.
- **Expand the Four Corners Activity Into a Debate:** Instead of informal discussion, require students to present at least two supporting pieces of evidence for their stance, then switch corners midway to argue from an opposing viewpoint.
- **Encourage Critical Source Evaluation:** Encourage higher-order questioning, prompting students to compare the effects of different social media platforms. Have students examine sources for bias, credibility, and gaps in information, using fact-checking strategies.
- **Compare Multiple Sources for Discrepancies:** Require students to analyze how different publications report on the same issue, encouraging skepticism and media literacy in research.

Grade 12: Preparing for Real-World Application

Cognitive Focus: Independent learning, evaluating the credibility of sources, and critiquing problem-solving frameworks.

Objective: Empower students to take full ownership of their learning, refine research-based arguments, and critically evaluate the effectiveness of design frameworks.

- **Push the Quickwrite to a Research-Based Reflection:** Give students more autonomy in choosing research directions early on.
- **Challenge Students to Critique PBL and Design Thinking:** Ask students to critique the effectiveness of PBL and design thinking in solving real-world issues.
- **Encourage Critical Source Evaluation:** Challenge students to evaluate sources critically, distinguishing between high- and low-credibility information.