Center for the Enhancement of Learning and Teaching

TEACHING TRANSFERABLE SKILLS

Instructor Resource Guide

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THE VALUE OF ESSENTIAL SKILLS

Higher education is evolving to prepare students for an unpredictable and rapidly changing world. While content knowledge remains important, research consistently shows that students also need transferable skills — such as communication, critical thinking, and teamwork — to navigate professional and civic life successfully (National Association of Colleges and Employers, 2021). The ten essential skills outlined in this resource guide equip students with the competencies they need to approach complex problems, collaborate effectively, and adapt to new challenges.

Employers emphasize these skills as crucial for career readiness. Surveys from the AAC&U and NACE highlight that strong communication, problem-solving, and teamwork abilities are among the most sought-after competencies in the workforce (AAC&U, 2022). Yet, many students and instructors alike struggle with how to explicitly teach and assess these skills in coursework. This guide provides practical strategies for integrating skill development into course design, ensuring students not only learn content but also gain the ability to apply it effectively.

Designing Courses with Skills in Mind

A crucial step in integrating essential skills into coursework is aligning them with course learning objectives. Well-written learning objectives help students see the relevance of skill development and provide clear expectations for how they will engage with and demonstrate these skills.

Prompts to Encourage Skill-Based Learning Design

- How can students practice applying this concept in a novel situation?
- In what ways can students demonstrate their understanding beyond traditional exams or papers?
- How can students reflect on their skill development and articulate their growth?

Guidelines for Writing Learning Objectives that Incorporate Skills

- Use Bloom's Taxonomy to frame objectives in terms of cognitive processes (e.g., analyze, evaluate, create).
- Be explicit about the skill being developed alongside the content.
- Use active verbs that align with measurable outcomes.
- Connect the skill to real-world applications or discipline-specific challenges.

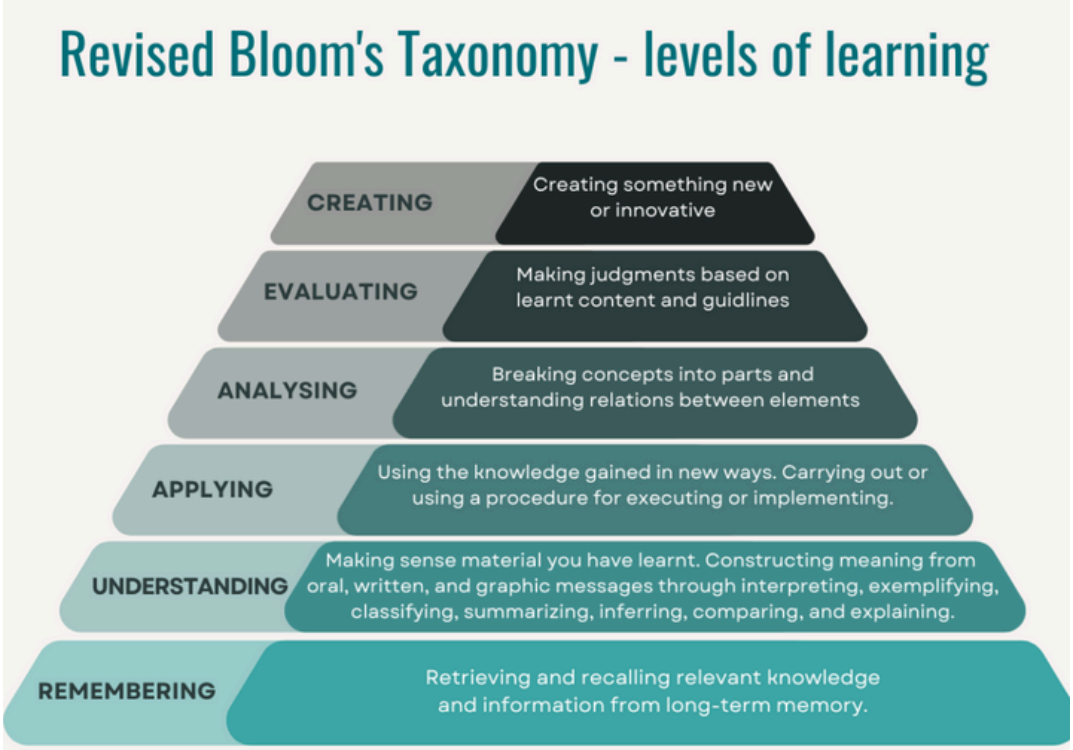
I**nstead of**: *Students will understand research methods in sociology.*

Try: *Students will evaluate and communicate research findings through clear, structured written reports and oral presentations.*

Instead of: *Students will learn about ethical dilemmas in business.*

Try: *Students will analyze ethical dilemmas and articulate well-reasoned responses using professional and persuasive communication strategies.*

By intentionally crafting learning objectives that integrate essential skills, instructors can create a more meaningful and applied learning experience for students.



https://gerta.eu/blooms-taxonomy-how-can-it-help-you-design-better-online-courses/

USING AI TO SUPPORT SKILL DEVELOPMENT

Why AI Matters in Skill Development

Artificial intelligence (AI) is rapidly transforming the way we learn, work, and communicate. While AI tools offer powerful ways to enhance problem-solving, streamline workflows, and support decision-making, they are most effective when used strategically and reflectively. Developing AI literacy is an essential component of career readiness, allowing students to use AI ethically, critically evaluate its outputs, and integrate AI-generated insights with human expertise (Mollick & Mollick, 2023).

Rather than viewing AI as a shortcut or replacement for essential skills, students should be encouraged to engage with AI as a cognitive partner, helping them build, refine, and reflect on their competencies. This section outlines how AI can support learning and skill development while reinforcing the importance of human judgment, creativity, and ethical reasoning in its use.

Approaches to AI Use as a Skill

Students and educators can leverage AI in three primary ways to support the development of essential skills:

Thought Partner

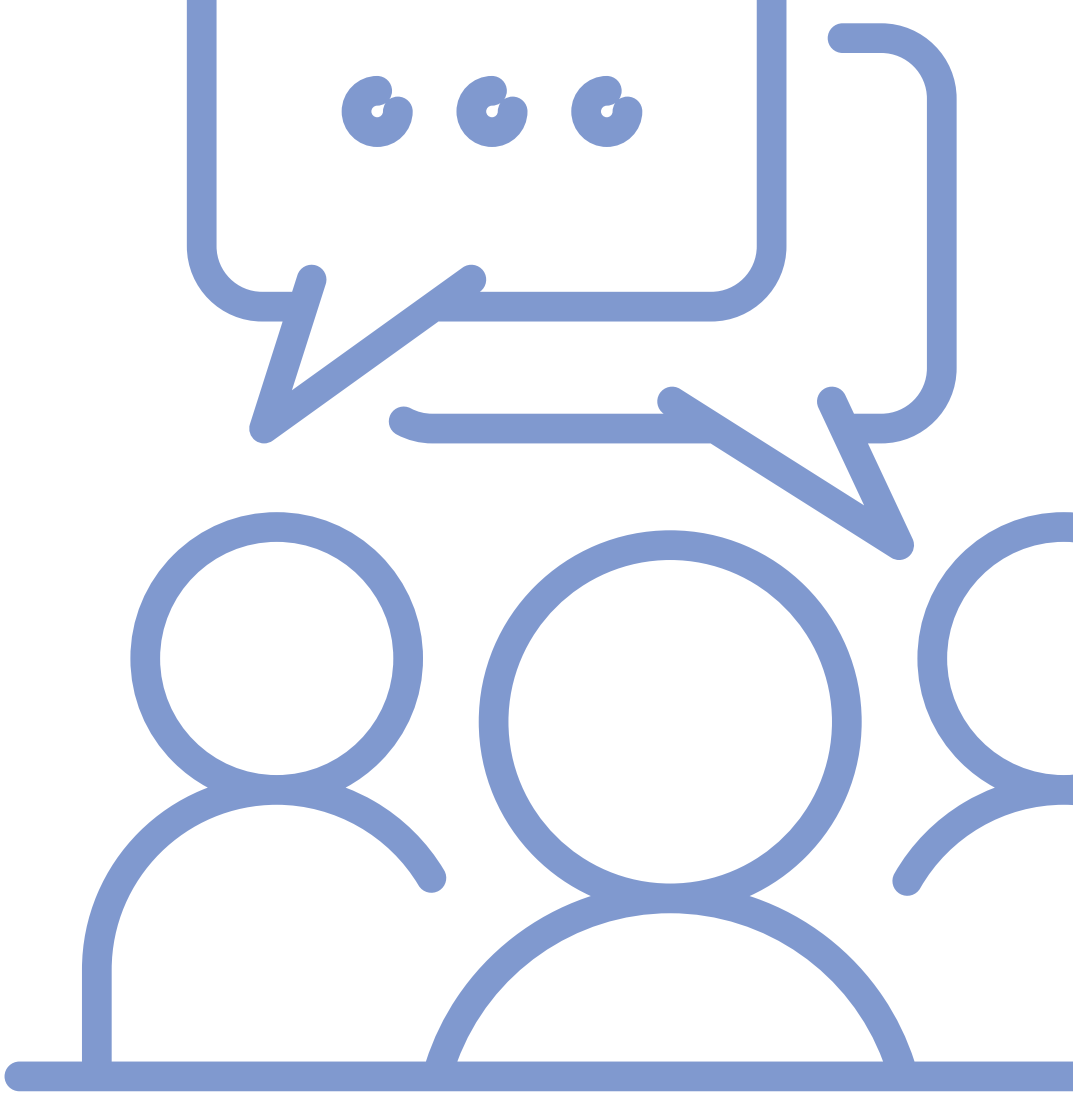
AI can help generate ideas, provide alternative perspectives, and refine arguments by offering structured prompts and insights

Research & Analysis Tool

AI can assist in finding patterns, summarizing complex information, and identifying trends across large datasets.

Skill Reflection & Improvement

AI can offer feedback on writing, communication, and critical thinking, helping students reflect on their work and refine their skills.



Essential Skill 8

COLLABORATE

AND WORK IN TEAMS

Graduates will have had numerous opportunities to collaborate with colleagues, become effective team members, and manage conflict.

Essential Skill 8

COLLABORATE

Why It Matters

The ability to collaborate effectively is essential for success in nearly every professional field. Employers consistently rank teamwork as one of the most sought-after skills, as it contributes to innovation, efficiency, and problem-solving (National Association of Colleges and Employers, 2021). Effective collaboration requires communication, adaptability, conflict resolution, and shared accountability, all of which contribute to strong professional relationships and high-functioning teams.

Beyond professional contexts, teamwork is crucial for addressing complex social and organizational challenges. Research shows that diverse teams — when effectively managed — produce better outcomes by integrating multiple perspectives and skill sets (Salas et al., 2018). By embedding opportunities for students to develop collaborative skills, instructors help them become valuable contributors in their workplaces and communities.

Integrating This Skill into Your Course

To help students develop strong teamwork and collaboration skills, consider the following strategies:

- **Structure team-based learning intentionally.** Clearly define team objectives, roles, and expectations to foster accountability and equitable participation.
- **Encourage evidence-based decision-making**. Have students use research and data to support team recommendations and promote constructive problem-solving.
- **Provide opportunities for role flexibility.** Allow students to practice both leadership and supportive roles to build adaptability in group settings.
- **Teach effective feedback and communication strategies.** Encourage students to give and receive feedback respectfully, fostering stronger team cohesion.
- **Model conflict resolution and negotiation skills.** Provide guidance on navigating disagreements constructively to ensure that differences strengthen, rather than hinder, collaboration.

By embedding structured teamwork opportunities into coursework, instructors help students build the skills necessary for successful collaboration in diverse professional and social contexts.

Addressing Student Buy-In

Many students have had negative experiences with group work and may be hesitant to engage in teamwork-based assignments. To foster positive participation:

- Acknowledge common frustrations. Address challenges such as unequal participation and conflict early, and provide strategies for managing them.
- Emphasize teamwork as a professional competency. Connect teamwork skills to workplace expectations, highlighting how collaboration enhances employability (Hughes & Jones, 2011).
- Provide structured support. Use progress check-ins, peer evaluations, and team contracts to create accountability and prevent common pitfalls.
- Celebrate strong team dynamics. Recognize and reward effective teamwork through reflections, feedback, and discussions about successful collaboration.

By framing teamwork as a practical, real-world skill rather than just a course requirement, instructors help students approach group work with greater motivation and confidence.

Ways to Identify Collaboration Skill Development in Your Courses

Instructors may already be fostering teamwork in ways that can be made more explicit. Look for:

- Assignments requiring collaborative decision-making. Do students work together to generate solutions or analyze problems?
- Opportunities to practice giving and receiving feedback. Are students engaging in structured peer review or reflective discussions on teamwork?
- Activities requiring team coordination. Are students navigating roles, timelines, and project goals in a way that mirrors professional teamwork?
- Reflection on team dynamics. Are students analyzing what makes a team effective and how their experiences align with best practices?

Making these skill-building moments explicit helps students recognize the value of teamwork and apply collaborative skills intentionally.

The CPE Essential Skill Rubric for Collaboration and Working in Teams

Effective teamwork is critical for student success in academic, professional, and civic life. The Kentucky Council on Postsecondary Education (CPE) Essential Skill Rubric for Collaboration and Teamwork provides a structured framework to assess and support students as they grow in their ability to work effectively in groups, manage conflict, and balance leadership with supporting roles.

How This Guide Can Support You

This guide offers practical, scaffolded activities aligned with the CPE Essential Skill Rubric for Collaboration and Working in Teams. These activities are designed to help instructors:

- Integrate structured opportunities for students to collaborate through case studies, group projects, and peer feedback.
- Support students in reflecting on team dynamics and conflict resolution.
- Adapt activities across disciplines and course sizes to encourage equitable participation and accountability.

Each activity includes guidance on implementation, along with AI-supported and non-AI alternatives, providing instructors with multiple options based on their course structure and student needs.

- When using this guide, instructors may find it helpful to consider:
  - Where collaboration skills naturally align with their existing course activities and assignments.
  - Whether an activity works best as a formative practice opportunity or a summative assessment.
  - How to adapt an activity for different class sizes, disciplines, or student experience levels.

By using these activities, instructors can make group work a meaningful opportunity for students to practice durable collaboration skills that will transfer into workplace and community contexts.

Example Scaffolded Skill Assignment Progression

A structured approach ensures that students develop teamwork skills over time, transitioning from individual contributions to fully collaborative team projects.

Stage	Activity Example
Early Semester	Low-stakes group activities focused on communication and brainstorming, self-assessments of collaboration strengths.
Mid-Semester	Team-based case studies, structured peer evaluations, rotating leadership in group assignments.
End of Semester	Long-term group projects, team presentations, reflection essays on collaboration experiences.

By scaffolding teamwork and collaboration across the semester, instructors help students build confidence in working effectively with diverse teams.

References

Colby, A., Ehrlich, T., Beaumont, E., & Stephens, J. (2007). Educating for democracy: Preparing undergraduates for responsible political engagement. Jossey-Bass.

Finley, A. (2011). Civic learning and democratic engagement: A review of the literature on civic engagement in postsecondary education. Association of American Colleges and Universities.

Musil, C. M. (2009). Educating students for personal and social responsibility. Peer Review, 11(1), 4-8.

Essential Skill 8: Collaborate and work in teams.

Graduates will collaborate with colleagues, become effective team members, and manage conflict.

Benchmark College entry	**Milestone** End of 2 years of college	**Capstone** Bachelor's degree completion
Supports team decisions by participating in discussions.	Contributes ideas aligned to identified objectives of the team.	Advocates for evidence-based solutions that promote the teams' identified objectives.
Responds promptly to messages and requests for information.	Addresses conflicts constructively, communicating expectations and adjusting own behavior based on feedback received.	Fosters strong team cohesion by giving and soliciting feedback and responding transparently.
Completes tasks on time and recognizes how individual responsibilities impact team goals.	Identifies tasks required to reach a goal and learns about team members' assets to support the distribution of roles and responsibilities.	Collaborates with multiple teams, utilizing different perspectives and skills to achieve common goals.
Acknowledges both strengths and limitations within a team.	Adapts to changing project requirements and roles in a way that fosters mutual trust and respect amongst team members.	Navigates between leading and supporting through advocacy for mutual goals and integration of team members' strengths.

Instructional Materials

Explore adaptable example activities, assignments, and assessments

Activity

Team Charter & Role Exploration

Objective

To help students practice setting group norms and defining roles in a collaborative task.

Context

Research on team-based learning shows that establishing shared expectations early helps prevent common group-work challenges such as unequal participation or conflict (Salas et al., 2018). Students often bring varied experiences with group projects, and some may be hesitant due to prior negative experiences. Creating a team charter at the beginning of collaboration gives students a clear framework for accountability, trust, and role distribution, aligning with the Benchmark level of the CPE rubric (participating in discussions, completing tasks on time, acknowledging strengths/limitations).

Instructions

1. Form Groups

- Place students in small groups of 3–5.

2. Distribute Template

- Provide a team charter template with sections for:
  - Shared project goals
  - Ground rules for communication and accountability
  - Individual member strengths, challenges, and preferred roles

3. Draft Charter

- Students work together to complete their charter during class time, negotiating expectations and distributing responsibilities.

4. Individual Reflection

- Each student submits a one-page reflection addressing:
  - “What role do I feel most comfortable in and why?”
  - “What role challenges me?”
  - “How will I support the success of others in this team?”

Activity

Team Charter & Role Exploration

TIPS

- Model Strengths & Limits
  - Share examples like: “I’m strong with research but struggle with time management” to normalize vulnerability.
- Revisit the Charter
  - Encourage teams to review their charter at mid-semester to check accountability and adjust norms.
- Acknowledge Past Frustrations
  - Validate that many students have had negative group experiences, and frame this activity as a tool to avoid those pitfalls.

Activity

Example Assessment

Completed Team Charter and Reflection

- One-page reflection with embedded or attached team charter
- After completing the team charter, each student submits a short reflection answering:
  - “What role do I feel most comfortable in and why?”
  - “What role challenges me?”
  - “How will I support the success of others in this team?”

Criteria	Exemplary	Proficient	Developing	Needs Improvement
Charter Contribution	Makes clear, specific contributions to charter; helps establish norms and role distribution collaboratively	Contributes meaningfully to charter, with some input on norms or roles	Provides limited or vague input into charter; relies heavily on peers	Minimal or no evidence of contribution
Reflection on Roles	Identifies strengths and limitations with thoughtful detail; connects role choices to team success	Identifies at least one strength and one challenge; makes some connection to team success	Mentions role comfort or challenge but with little explanation	No meaningful reflection on role
Commitment to Team Success	Offers concrete strategies for supporting peers and ensuring accountability	Notes at least one way to support others	General or vague statements about teamwork support	No commitment to supporting others evident
Awareness of Accountability	Demonstrates strong awareness of how individual responsibilities impact team goals	Recognizes that responsibilities matter for team outcomes	Mentions responsibility but lacks depth	Does not address accountability

AI-Supported Activity

AI-Simulated Team Scenario Practice

Objective

To help students practice foundational teamwork behaviors—participating in discussions, acknowledging strengths and limitations, and recognizing the impact of responsibilities—by engaging with an AI that simulates group dynamics.

Context

Students often struggle to imagine what effective collaboration looks like beyond their immediate course projects. AI tools can provide low-stakes simulations of team interactions, prompting students to practice decision-making, role distribution, and conflict management. At the Benchmark level of the CPE rubric, students should participate in discussions, complete tasks on time, and recognize how responsibilities impact team goals. By interacting with an AI-powered "team scenario," students get immediate, varied practice with these entry-level teamwork skills before applying them with peers.

Instructions

1. Scenario Selection

- Students select a short teamwork scenario prompt (e.g., "Your team has one week to present a case study. One member has missed two meetings. How do you respond?").

2. AI Interaction

- Using a chatbot (e.g., ChatGPT, Claude, Perplexity), students copy in the AI prompt template (see below).
- Students ask at least three follow-up questions or responses to explore role responsibilities, deadlines, and conflict.

3. Reflection Writing

- After the AI interaction, students write a brief reflection:
  - "What strategies seemed most effective in keeping the team on track?"
  - "How did I acknowledge both my own role and the roles of others?"
  - "What will I try to apply in my real team this semester?"

4. Peer Sharing

- In small groups, students share one insight from their AI conversation and discuss similarities/differences.

AI-Supported Activity

Prompt Template (for Student Use)

"Hello, I am practicing teamwork skills. Please simulate a short group project scenario where my team faces challenges (e.g., missed deadlines, unclear roles, or conflict about decisions). Present the situation, and I will respond as if I were a team member. Provide realistic follow-up responses from the 'other team members' so I can practice adapting my behavior."

Follow-up Questions to Ask

After the AI provides an initial response, students should practice asking specific follow-up questions to gain deeper understanding and clarity.

Clarifying Roles	• "What role do you think I should take in this scenario?" • "How do my strengths or limitations fit with the team's needs?"
Accountability and Tasks	• "What happens if a teammate doesn't complete their part on time?" • "How could I step in to support without taking over?"
Conflict and Communication	• "How can I address frustration with a teammate constructively?" • "What would be a respectful way to reset team expectations?"
Team Goals	• "How can I make sure my work contributes to the team's objectives?" • "What's the best way to respond if the team changes direction?"

TIPS

- Encourage students to push beyond surface-level responses (e.g., "I'd just tell them to do the work") toward constructive feedback and accountability.
- Remind students that AI-generated scenarios are practice opportunities, not perfect replications of team dynamics.
- Have students compare AI suggestions with best practices from class discussions.

Activity

Example Assessment

Conversation Transcript and Reflection

- Reflection prompts:
  - Which AI-generated scenario or challenge felt most realistic, and why?
  - How did my responses acknowledge my role and responsibilities in the team?
  - What strategies from this practice could I apply to my real group work this semester?

Criteria	Exemplary	Proficient	Developing	Needs Improvement
Engagement with AI Scenario	Sustains dialogue with at least 3 thoughtful responses that directly address scenario challenges	Completes 3 responses, but some are vague or repetitive	Responds fewer than 3 times or with minimal depth	Does not engage meaningfully with AI
Role & Responsibility Awareness	Clearly acknowledges own role, strengths, and impact on team goals	Notes role or responsibility in general terms	Mentions role vaguely, without linking to team goals	No mention of role or responsibilities
Constructive Strategy Use	Demonstrates specific strategies for accountability, support, or conflict resolution	Identifies at least one strategy for improving teamwork	Suggests vague or incomplete strategy	No strategies for teamwork improvement offered
Reflection Quality	Provides insightful analysis of AI practice and transferability to real teamwork	Identifies at least one useful takeaway for future collaboration	Reflection is vague or surface-level	No meaningful reflection submitted

Activity

Peer Evaluation & Feedback Practice

Objective

To help students develop adaptability and constructive feedback skills by practicing giving and receiving peer evaluations that promote accountability and team improvement.

Context

The Milestone level of the CPE rubric emphasizes contributing ideas, adapting to changing roles, and addressing conflicts constructively through feedback. Research shows that peer evaluation improves team accountability and helps students refine interpersonal skills when structured effectively (Hughes & Jones, 2011). Many students struggle to provide specific, respectful, and actionable feedback. This activity introduces sentence stems and guided peer evaluation as scaffolding for practicing this skill.

Instructions

1. Distribute Peer Evaluation Form

- At mid-semester, provide each student with a short evaluation form that rates team members on reliability, communication, and participation.

2. Submit Individual Evaluations

- Students complete evaluations privately and return them to the instructor.

3. Facilitate Feedback Sessionr

- Teams hold a structured meeting where each member shares one “strength” and one “area for growth” with their peers using provided sentence stems:
  - “One strength you bring to the team is…”
  - “One area you could grow in is…”
  - “One way I will adjust my own work is…”

4. Develop Action Plan

- Each student writes a short action plan on how they will adjust their contributions moving forward, based on peer feedback received.

5. Instructor Check-In

- The instructor reviews action plans and meets briefly with teams to encourage constructive follow-up.

Activity

Peer Evaluation & Feedback Practice

TIPS

- Model Specific Feedback
  - Show examples of vague vs. specific comments (“You don’t do much” vs. “I’d like you to share at least one idea in each meeting”).
- Normalize Growth
  - Frame evaluation as a learning process, not as punitive.
- Revisit Plans
  - Have students update their action plans at the end of the semester to track improvement.

Activity

Example Assessment

Completed Peer Evaluation and Action-Plan

- Reflection Prompts:
  - What feedback from my peers was most useful, and why?
  - How will I adjust my participation in future team meetings?
  - What is one strength I will continue to contribute to the team?

Criteria	Exemplary	Proficient	Developing	Needs Improvement
Feedback Quality	Provides specific, respectful, and actionable feedback with clear examples	Provides feedback with some specificity and respectful tone	Feedback is vague, general, or minimally constructive	Feedback missing or dismissive
Engagement in Feedback Session	Actively participates in discussion; acknowledges peer feedback and responds constructively	Participates in session; acknowledges at least one piece of feedback	Minimal engagement; little evidence of constructive respons	Does not participate or dismisses peers
Action Plan	Creates a clear, detailed plan to adapt contributions; connects feedback to team goals	Notes at least one concrete adjustment to make	Action plan is vague or incomplete	No meaningful plan submitted
Reflection Insight	Thoughtfully explains which feedback was most useful and how it will improve teamwork	Identifies one useful piece of feedback; some discussion of improvement	Mentions feedback but little connection to improvement	No reflection on feedback

AI-Supported Activity

AI-Facilitated Peer Feedback Practice

Objective

To help students practice giving and receiving constructive peer feedback by simulating feedback conversations with AI before applying them in real team settings.

Context

At the Milestone level of the CPE rubric, students are expected to adapt to changing project requirements, address conflicts constructively, and adjust their behavior based on feedback. Many students hesitate to give peers honest feedback or phrase it too vaguely. Practicing with AI provides a low-stakes environment to refine respectful, specific, and actionable feedback. Research suggests that simulated practice with conversational agents can help students improve communication strategies and confidence before engaging with real peers (Labadze et al., 2023).

Instructions

1. Draft Initial Feedback

- Each student writes short feedback for a fictional "teammate" (e.g., "You missed our last two meetings, and that messed up the project timeline.")

2. AI Conversation

- Using a chatbot (e.g., ChatGPT, Claude, CoPilot, etc.), students enter the prompt template (see next page) to role-play the exchange. The AI responds as a teammate, and students must continue the dialogue with at least 3 follow-up responses.

3. Revise Feedback

- Students reflect on how to rephrase or strengthen their feedback for clarity and respectfulness, using AI suggestions to improve tone and specificity.

4. Peer Application

- After practice with AI, students bring their refined feedback strategies into an in-class peer evaluation session.

AI-Supported Activity

Prompt Template (for Student Use)

"You are my teammate in a group project. I am practicing how to give constructive feedback. Please role-play receiving feedback from me. Respond as if you are a teammate who may be surprised, defensive, or appreciative. After I give feedback, continue the dialogue so I can practice responding respectfully and constructively."

Follow-up Questions to Ask

After the AI provides an initial response, students should practice asking specific follow-up questions to gain deeper understanding and clarity.

Clarifying Roles	• "What role do you think I should take in this scenario?" • "How do my strengths or limitations fit with the team's needs?"
Accountability and Tasks	• "What happens if a teammate doesn't complete their part on time?" • "How could I step in to support without taking over?"
Conflict and Communication	• "How can I address frustration with a teammate constructively?" • "What would be a respectful way to reset team expectations?"
Team Goals	• "How can I make sure my work contributes to the team's objectives?" • "What's the best way to respond if the team changes direction?"

TIPS

- Encourage students to test multiple tones (direct, encouraging, diplomatic) and compare which responses AI handled the best,.
- Remind students that AI can simulate defensiveness, but real teammates may react differently, so reflection is a critical component.
- Have students share examples of strong rephrasing in clas for collective learning.

AI-Supported Activity

AI-Facilitated Peer Feedback Practice

TIPS

- Encourage students to test multiple tones (direct, encouraging, diplomatic) and compare which responses the AI handled best.
- Remind students that AI can simulate defensiveness, but real teammates may react differently—reflection is key.
- Have students share examples of strong rephrasing in class for collective learning.

Activity

Example Assessment

Transcript of AI Role-Play and Reflection

Reflection prompts include:

- What did I learn about phrasing feedback constructively?
- How did the AI's responses challenge me to adapt my tone?
- What strategy will I apply in real peer evaluations?

Criteria	Exemplary	Proficient	Developing	Needs Improvement
Feedback Quality	Provides specific, respectful, actionable feedback; refines phrasing with AI suggestions	Provides feedback with some specificity; attempts rephrasing	Feedback is vague or general; limited rephrasing	No meaningful feedback provided
AI Role-Play Engagement	Sustains dialogue with at least 3 thoughtful follow-ups; adapts responses based on AI behavior	Completes 3 responses but limited adaptation	Minimal follow-up; repetitive or shallow responses	No meaningful engagement with AI
Application to Real Peer Work	Clearly transfers insights from AI role-play into action plan for peer evaluation	Mentions at least one takeaway for real teamwork	Vague or incomplete connection to real teamwork	No evidence of transferability
Reflection Quality	Insightful reflection on growth, strategies, and future improvement	Notes one or two useful strategies learned	Reflection lacks depth or detail	No reflection submitted

Activity

Rotating Leadership Case Challenge

Objective

To assess students' ability to integrate multiple perspectives, shift between leadership and support roles, and advocate evidence-based solutions as part of a collaborative team project.

Context

At the Capstone level of the CPE rubric, students are expected to navigate between leading and supporting roles, advocate for evidence-based solutions, and foster strong team cohesion through constructive feedback. Literature highlights that structured, interdisciplinary challenges — such as capstone projects — are powerful environments for developing these advanced teamwork skills (Anderson et al., 2022; Riebe et al., 2016). Transformational leadership and participative safety further enhance collaboration, ensuring trust, adaptability, and equitable participation (Wang & Howell, 2010; Pullon et al., 2009). By embedding role rotation and evidence-based problem solving, this activity prepares students for the complexity of real-world team dynamics.

Instructions

1. Form Teams and Assign Case

- Place students into teams of 4–6 and assign a complex, discipline-relevant case study (e.g., an ethical dilemma, a public health policy decision, or a technical design challenge)

2. Structure Rotating Leadership Rounds

- Break the project into 3–4 work phases (e.g., research, analysis, solution-building, presentation). Each phase must be led by a different team member, while others support.

3. Develop Evidence-Based Recommendation

- Teams gather evidence, integrate perspectives, and prepare a recommendation or solution to present.

4. Deliver Presentation

- Teams present their findings in class, emphasizing how their solution is grounded in evidence and collaborative decision-making.

Activity

Rotating Leadership Case Challenge

TIPS

- Encourage students to define what “effective leadership” looks like before starting.
- Remind leaders that facilitation and inclusion are as important as decision-making.
- Provide teams with check-in points to prevent leaders from dominating or members disengaging.
- Tie cases to real-world, interdisciplinary challenges to increase authenticity and engagement.

Activity

Example Assessment

Team Case Presentation and Individual Reflection

- Reflection Prompts:
  - How did I balance leadership and support roles?
  - How did our team ensure that decisions were grounded in evidence?
  - What strategies contributed to (or hindered) team cohesion?

Criteria	Exemplary	Proficient	Developing	Needs Improvement
Leadership & Support	Demonstrates strong ability to lead and support across phases; integrates diverse perspectives	Leads or supports effectively in most phases; acknowledges others' roles	Feedback is vague, general, or minimally constructive	Feedback missing or dismissive
Evidence-Based Solutions	Advocates for and integrates evidence consistently into team decisions	Uses evidence in team decisions with some consistency	Limited or inconsistent use of evidence in solutions	Minimal or no use of evidence
Team Cohesion	Actively fosters trust, respect, and constructive feedback throughout project	Contributes to positive team dynamics; responds to feedback	Minimal effort to engage in cohesion or conflict resolution	Dismisses feedback; hinders team cohesion
Reflection Quality	Insightfully analyzes own roles, team dynamics, and future applications	Identifies at least one strength and one area for growth	Provides vague or incomplete discussion of roles/teamwork	No meaningful reflection submitted

AI-Supported Activity

AI-Assisted Team Decision Mapping

Objective

To refine students' ability to evaluate and integrate multiple perspectives into evidence-based team decisions by using AI to generate decision pathways, anticipate outcomes, and support collaborative consensus-building.

Context

At the Capstone level, collaboration requires navigating complex decisions, integrating evidence, and balancing leadership with support roles. Students must also foster cohesion by transparently communicating and justifying team choices. Research on teamwork pedagogy highlights the value of structured preparation and leadership in high-stakes group projects (Rudawska, 2017; Wang & Howell, 2010). AI can support this process by helping teams map potential solutions, identify overlooked considerations, and analyze trade-offs. Rather than replacing human judgment, AI serves as a "decision support partner," encouraging teams to compare, critique, and refine their own reasoning.

Instructions

1. Assign Case Challenge

- Place teams in groups of 4–6 and give them a complex, interdisciplinary case study (e.g., climate policy, business ethics, healthcare equity).

2. Generate AI Decision Pathways

- Each team inputs a structured prompt (see below) into an AI tool to generate at least 3 possible decision pathways or solutions, with pros and cons for each.

3. Team Deliberation

- Students evaluate AI-generated options, comparing them with their own research and perspectives. They must identify gaps, biases, or missing considerations in the AI output.

4. Select and Refine Solution

- Teams choose one pathway (or create a hybrid), grounding their decision in evidence and group consensus.

AI-Supported Activity

Prompt Template (for Student Use)

"You are supporting a team project. We need to evaluate solutions to the following case: [insert case description]. Please generate at least 3 possible decision pathways, list pros and cons for each, and suggest what evidence or perspectives might be missing that a team should consider before making a decision."

Follow-up Questions to Ask

After the AI provides an initial response, students should practice asking specific follow-up questions to gain deeper understanding and clarity.

Evidence and Gaps	• "What types of evidence would strengthen or challenge each option?" • "Are there stakeholder perspectives that haven't been considered?" • "What long-term consequences might we be overlooking?"
Comparisons and Trade-Offs	• "How do these options differ in terms of feasibility or ethical implications?" • "Which solution best balances short-term vs. long-term goals?" • "What trade-offs should a team be aware of before deciding?"
Team Dynamics	• "How could roles within a team (leader, supporter, skeptic) influence which option gets chosen?" • "What strategies might help a team build consensus if members disagree about the best path?"
Adaptability	• "If circumstances changed — e.g., new evidence emerged or resources were reduced — how would the team need to adjust its decision?"

TIPS

- Remind students AI is a support tool, not a substitute — they must critique and adapt outputs.
- Encourage rotating roles (leader, skeptic, evidence-finder, recorder) during deliberation.
- Have students compare AI's reasoning with disciplinary sources to highlight the importance of evidence-based teamwork.

Activity

Example Assessment

AI-Assisted Decision Pathway Presentation & Reflection

- Deliverables: AI-generated decision pathways + team presentation (group) + individual reflection.
- Reflection questions may include:
  - Which AI-generated option did we find most compelling, and why?
  - What did our team add, challenge, or change about the AI's output?
  - How did rotating leadership affect our decision-making process?

Criteria	Exemplary	Proficient	Developing	Needs Improvement
Use of AI Output	Critically evaluates AI pathways; integrates strengths and addresses limitations transparently	Uses AI pathways with some critique and adaptation	Relies heavily on AI suggestions with minimal evaluation	Accepts AI output uncritically
Evidence-Based Decision	Solution is well-supported with research, clearly balancing multiple perspectives	Solution includes some supporting evidence and perspectives	Limited evidence or perspective integration	No evidence-based justification
Team Dynamics	Demonstrates clear role rotation, balanced participation, and constructive conflict resolution	Roles mostly balanced; some evidence of constructive teamwork	Uneven participation; limited role-sharing	Dominated by one member or unresolved conflict
Reflection Quality	Insightful discussion of AI's role, team process, and transferable lessons	Identifies at least one useful takeaway	Vague or incomplete reflection	No meaningful reflection submitted

References

Anderson, Z., Hargiss, C., & Norland, J. (2022). Skill development using interdisciplinary problem solving in a natural resources capstone course. Journal of Natural Resources and Life Sciences Education, 51(1). https://doi.org/10.1002/nse2.20078

Bucic, T., Robinson, L., & Ramburuth, P. (2010). Effects of leadership style on team learning. Journal of Workplace Learning, 22(4), 228-248. https://doi.org/10.1108/13665621011040680

Fathi, M., Ghobakhloo, M., & Syberfeldt, A. (2019). An interpretive structural modeling of teamwork training in higher education. Education Sciences, 9(1), 16. https://doi.org/10.3390/educsci9010016

Guaman-Quintanilla, S., Everaert, P., Chiluiza, K., & Valcke, M. (2022). Fostering teamwork through design thinking: evidence from a multi-actor perspective. Education Sciences, 12(4), 279. https://doi.org/10.3390/educsci12040279

Li, N., Ullrich, C., Helou, S., & Gillet, D. (2010). Using social software for teamwork and collaborative project management in higher education., 161-170. https://doi.org/10.1007/978-3-642-17407-0_17

Mandel, L., Moen, M., & Karno, V. (2020). Teaming up to teach teamwork in an lis master's degree program. Evidence Based Library and Information Practice, 15(2), 85-99. https://doi.org/10.18438/eblip29684

Pfaff, E. and Huddleston, P. (2003). Does it matter if i hate teamwork? what impacts student attitudes toward teamwork. Journal of Marketing Education, 25(1), 37-45. https://doi.org/10.1177/0273475302250571

Pullon, S., McKinlay, E., & Dew, K. (2009). Primary health care in new zealand: the impact of organisational factors on teamwork. British Journal of General Practice, 59(560), 191-197. https://doi.org/10.3399/bjgp09x395003

Ramdeo, S., Balwant, P., & Fraser, S. (2022). Not another team assignment! student perceptions towards teamwork at university management programs. Higher Education Skills and Work-Based Learning, 12(6), 1122-1137. https://doi.org/10.1108/heswbl-01-2022-0015

Riebe, L., Girardi, A., & Whitsed, C. (2016). A systematic literature review of teamwork pedagogy in higher education. Small Group Research, 47(6), 619-664. https://doi.org/10.1177/1046496416665221

Rudawska, A. (2017). Students' team project experiences and their attitudes towards teamwork. Journal of Management and Business Administration Central Europe, 25(1), 78-97. https://doi.org/10.7206/jmba.ce.2450-7814.190

Wang, X. and Howell, J. (2010). Exploring the dual-level effects of transformational leadership on followers.. Journal of Applied Psychology, 95(6), 1134-1144. https://doi.org/10.1037/a0020754

Additional Resources

Essential Skill 8: Collaborate and Work in Teams

Podcasts

"Making Team Projects Work" *Tea for Teaching* https://teaforteaching.com/193-making-team-projects-work/

"Team-Based Learning with Jim Sibley" Teaching in Higher Ed
https://teachinginhighered.com/podcast/team-based-learning/

"Teamwork" Readiness Institute Podcast (Penn State)
https://readinessinstitute.psu.edu/programs/podcasts/podcast-episode-5-teamwork/

Web Resources & Articles

""Taking Collaboration Seriously" Faculty Focus https://www.facultyfocus.com/articles/effective-classroom-management/taking-collaboration-seriously/

"Project-Based and Dynamic Collaborative Learning" Vanderbilt University Center for Teaching
https://www.vanderbilt.edu/cdr/module-2/project-based-and-dynamic-collaborative-learning/

"Teamwork and Collaborative Learning" Montclair State University ITDS
https://www.montclair.edu/itds/digital-pedagogy/pedagogical-strategies-and-practices/teamwork-and-collaboration/

Books

Barkley, E. F., Cross, K. P., & Major, C. H. (2014). Collaborative learning techniques: A handbook for college faculty (2nd ed.). Jossey-Bass/Wiley.

Michaelsen, L. K., Knight, A. B., & Fink, L. D. (Eds.). (2004). Team-based learning: A transformative use of small groups in college teaching. Stylus Publishing.

Sibley, J., & Ostafichuk, P. (2014). Getting started with team-based learning. Stylus Publishing.

Smith, K. A. (2013). Teamwork and project management (4th ed.). McGraw-Hill Education.

Wheelan, S. A. (2021). Creating effective teams: A guide for members and leaders (6th ed.). SAGE Publications.