From Pencils to Pixels: Navigating Transformation in Education

Spring 2025 Summit

Day 2

Agenda

Day 2

Welcome and Mentimeter Results

Team Formation

Group Discussions

Hackathon Work Sessions

Peer Reviews

Testing and Troubleshooting

Closing

Your Feedback

Your feedback is important to us!

Source: Freepik.com

Pulse Check Results

What three words describe your experience of today's session together?

Pulse Check Results

What feedback can you give us to help us improve tomorrow's sessions?

:]	:]	More snacks and sugar :)
Na	Enjoyed the vibe! Let's continue the same tomorrow!	Everything was great so far, thank you
Less sitting. More considerate of neuro-divergent folks	So far it's great.	The post-keynote activities felt kinda rushed, yet those were what I got the most out of today.
None. Great thus far!	I appreciated the orientation to AI with the keynote and am very excited for tomorrow's work session!	Please can we make the room a little warmer?

Pulse Check Results

What feedback can you give us to help us improve tomorrow's sessions?

I enjoyed every aspect about today! Maybe time for fresh air?

Today was great, thank you

More beingets

Everything was organized very well.

Na

Personally, the group size is a bit large.

Great job with engaging activities.

Need bio breaks or permission to just get up and go 😆

Just ensure there are adequate breaks because it will be a long day.

Continue to monitor the temperature. It's cold!

I have loved everything about the day! More beignets, perhaps? 😊

Pulse Check Results

What feedback can you give us to help us improve tomorrow's sessions?

Not sure, my first time at Branch Ed event

N/a

Spread us out a bit more.

Salty snacks

Not at this time. It was very relevant.

Everything was great!

I thought today was a great mix of sharing information and engagement (for example- table talk).

Volume. I am hearing sensitive, so loud music and talking break my brain.

Keep up the good work!

Everything was well planned

Learning Objectives: Day 2

1. Joint teams based on shared interest in an opportunity and define initial for developing AI-driven solution.
2. Explore essential AI competencies for teacher candidates and consider how these insights shape Hackathon projects.
3. Define the problem, brainstorm possible AI solutions, and outline the core features of their project.
4. Learn how to craft effective AI prompts and apply these skills to enhance their project development.
5. Exchange ideas, receive early feedback, and refine project concepts through structured peer discussion, test functionality, and troubleshoot challenges.

Event Webpage

https://www.educatordiversity.org/branched-2025-spring-summit/

Case Study

AI for Teacher Well Being

To illustrate the hackathon process, we've developed an example case study that demonstrates how a team moves from a challenge to an AI-driven solution.

This case study will serve as a **reference** as you work through your own project, showing how teams:

- **Identify a problem and define an opportunity**
- **Develop and refine an AI-driven solution**
- **Plan for implementation and sustainability**

You will have access to the full example to explore in detail.

Step 1: Understanding the Opportunity

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Define your challenge and identify key barriers before moving into solutions.

Challenge Identified:

- Many teachers leave the profession due to burnout, stress, and lack of support.

Who is Affected?

- Teachers, students, and school communities.

Key Barriers to Address:

- Limited mental health resources
- High workload & emotional strain
- Lack of mentorship & support

Step 2: Ideation & Early Prototyping

Brainstorm, outline AI tools, and begin prototyping.

Proposed AI Solution:

- AI-powered Teacher Support Bot for well-being check-ins and mentorship.

AI Tools Used:

- **Playlab** (for chatbot design)
- **ChatGPT** (for personalized well-being prompts)
- **Canva** (for engagement materials)

Early Feedback Adjustments:

- Improve personalization based on teacher needs.
- Ensure ethical AI use and privacy protection.

Step 3: Development & Testing

Test and refine your solution based on feedback.

Implementation Plan:

- Pilot in teacher induction programs.
- Provide onboarding training for teachers.

Challenges Considered:

- Ensuring meaningful AI support (not just generic responses).
- Addressing data privacy and ethical AI concerns.

Peer Review Adjustments:

- Refine chatbot interactions for more personalized responses.
- Add a feedback mechanism to improve tool effectiveness.

Step 4: Measuring Impact & Refinement

Determine key success metrics and make final refinements.

How Will Success Be Measured?

- Teacher surveys on stress reduction.
- Retention rates in pilot schools.

Final Refinements:

- Add real-time feedback to improve user experience.
- Enhance training resources for better adoption.

Using this Case Study

A Roadmap for Your Hackathon Journey

This example is meant to be a guide to help you:

- Structure your team's process
- Identify AI strategies that work for your challenge
- Refine your solution through feedback

Your challenge and innovation will be different, but this case study provides a roadmap to help you navigate the process successfully.

Educator Awareness & Support in Today's Classrooms

How might we help higher education faculty better understand and respond to the challenges faced by both pre-service and in-service teachers, including workload demands, technological shifts, and socio-political pressures?

Exploring AI solutions that help faculty develop deeper awareness of teacher stressors, ensuring preparation programs align with the realities of today's educators.

Preparing Teacher Candidates for Equity-Oriented & Inclusive Teaching

How might we equip teacher candidates with the knowledge, skills, and persistence to implement culturally relevant, socially just, and equity-centered practices in today's classrooms?

Exploring AI-driven innovations that support the implementation and sustainability of equity-focused teaching.

Modeling AI Literacy & Effective Pedagogy Through Technology

How might we use emerging technologies—including AI—to model and enhance effective pedagogy, equipping teacher candidates with the skills they need for AI literacy?

Exploring ways to use AI as a teaching tool to model best practices while embedding AI literacy into teacher education.

Community Partnerships to Inspire Future Educators

How might we leverage community partnerships and technology to increase awareness, interest, and engagement in the teaching profession?

Exploring AI-driven marketing, storytelling, and community engagement strategies to promote teaching as an appealing career choice.

Bridging Teacher Prep & Real-World Application

How might we better support teacher candidates in applying pedagogical knowledge to real-world classroom challenges?

Exploring AI-supported tools that help teacher candidates bridge the gap between theory and practical classroom implementation.

Team Formation

Joining Forces to Tackle Key Challenges

Objective: Form teams based on shared interest in an opportunity and define your initial goals.

Process:

- Self-select into teams based on the top opportunities identified in affinity voting.
- Meet briefly to clarify the opportunity statement and establish initial goals.

This will help your team start with a **shared understanding** of the opportunity you will address.

Group Discussion 1

Designed by Freepik

What AI Competencies Do Teacher Candidates Need?

Objective: Explore essential AI competencies for future educators and consider how these insights shape hackathon projects.

Discussion Focus:

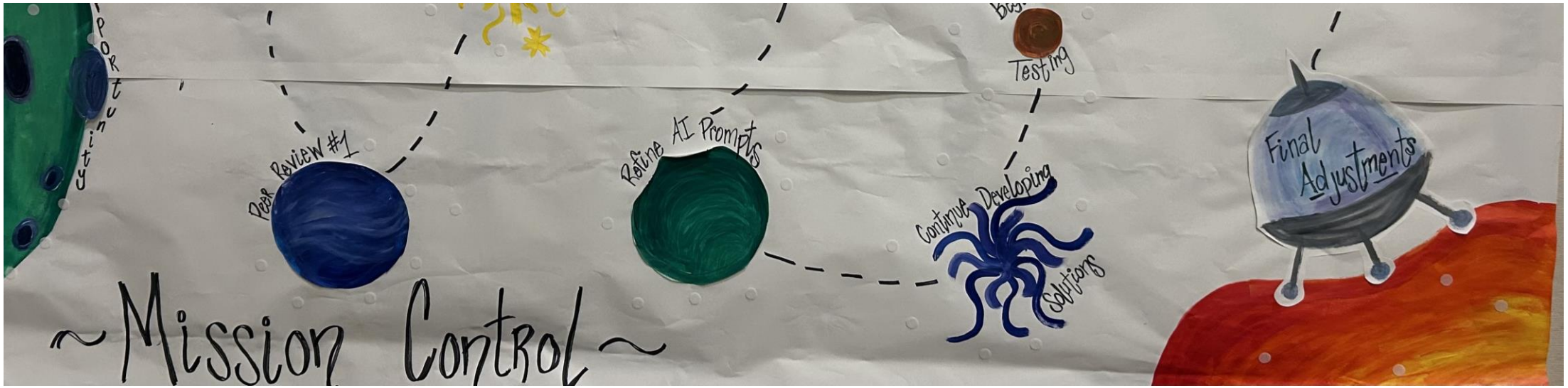
- What foundational AI skills should teacher candidates develop?
- How can these competencies be embedded into teacher preparation programs?
- How might this shape your team's project development?

BREAK TIME!

How Might We...

Use a large sticky note to add your team's final opportunity statement to the Launch Pad!

Mission Control



Name your team and track your progress across this hackathon adventure!

Stops include:

- *Define the opportunity*
- *Brainstorm Innovations*
- *Peer Review #1*
- *Refine Concept*
- *Begin Developing Solution*
- *Refine AI Prompts*
- *Continue Developing Solution*
- *Begin Testing*
- *Peer Review #2*
- *Final Adjustments*

Hackathon Work Session 1

Ideation & Early Prototyping

Defining the Problem & Exploring Solutions

Objective: Teams will define their problem, brainstorm AI-driven solutions, and outline core features.

Process:

- Outline the AI solution, explore potential tools, and define key features.
- Work with facilitators and mentors for feedback and guidance.

Lay the foundation - move fast, be creative, and stay open to iteration.

Hackathon Work Session 2

Working Lunch

Objective: Teams will develop their AI solution, integrating feedback and beginning to test functionality.

Process:

- Grab lunch and continue working—this is a working session!
- Begin building and refining your AI-driven tool or process.

Peer Review 1

Brainstorming & Early Feedback

- Teams pair up to share their initial ideas and get feedback.
- Teams should share:
  - The opportunity they are addressing.
  - Their proposed AI-driven solution.
  - Any early thoughts on implementation.

Guided Prompts for Feedback

Handout #1

- **Clarity & Focus:** Is the opportunity clearly defined?
- **Innovation & Feasibility:** How unique and viable is this approach?
- **Stakeholder Perspective:** How might different groups respond to this solution?
- **Next Steps:** What's one suggestion to strengthen this concept?

Learning Lab: Prompt Engineering

Why Prompt Engineering Matters

The quality of AI responses depends on the quality of the input.

- AI generates responses based on how we phrase our prompts. Better prompts = better, more useful results.
- Without strong prompts, AI may provide:
  - Vague or generic answers
  - Misinterpreted responses
  - Incomplete or irrelevant information

What is Prompt Engineering?

The practice of designing inputs that guide AI toward the best possible response.

What makes a good AI prompt?

- Clear & specific
- Contextualized
- Structured
- Concise yet comprehensive

The Anatomy of a Strong Prompt

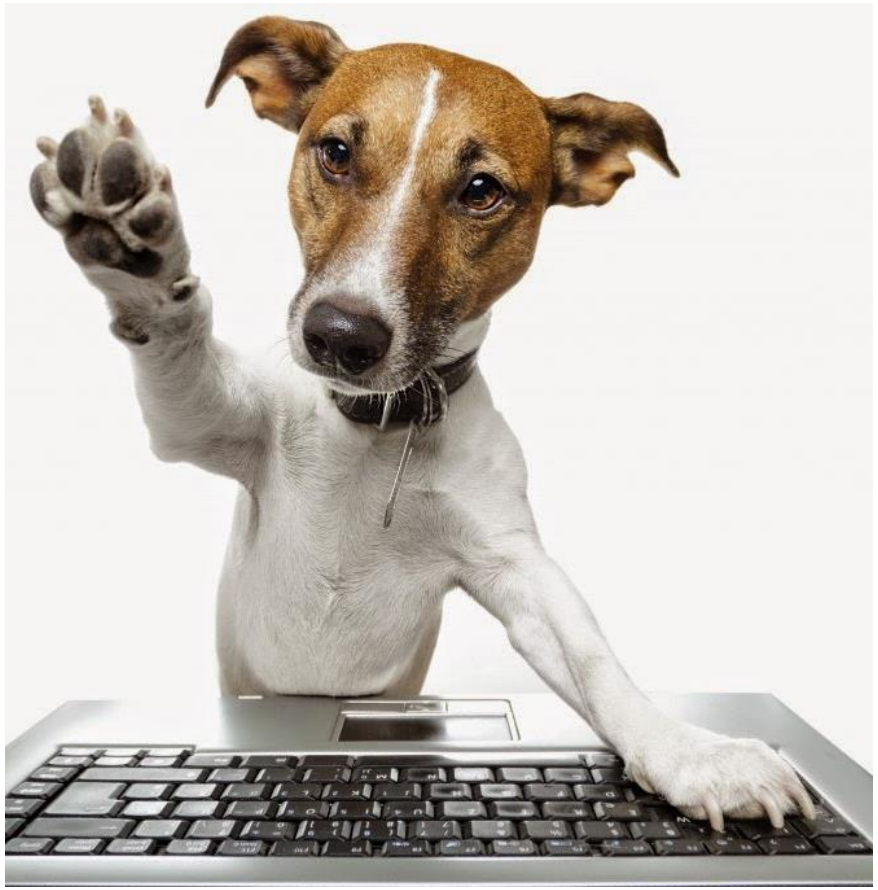
🚫 ***Weak Prompt:*** "Tell me about AI in education."

✅ ***Strong Prompt:*** "Explain three ways AI is used in teacher preparation programs. Provide examples of tools and discuss potential benefits and challenges."

What makes the second prompt better?

- Defines the focus
- Specifies scope & structure
- Asks for examples and perspectives

Mini-Exercise – Refining Prompts



ThePhoto by PhotoAuthor is licensed under CCYYSA.

Rewrite a weak AI prompt to make it clearer and more effective.

"How does AI help teachers?"

Make this prompt more specific and actionable.

- **In Pairs:** Discuss and refine your prompt.
- **At your table:** Share a few examples and discuss why they are more effective.

Context & Constraints

How Small Changes Impact AI Responses

- AI generates different outputs based on small changes in wording.
- Try adding context & constraints to enhance your response.
  - *"Act as an instructional coach. Provide three ways a new teacher can use AI to improve student engagement."*
  - *"Summarize the top ethical concerns with AI in education in under 100 words."*
- **Your Turn:** Test different versions of a prompt and compare responses.

Prompt A/B Testing

- Write two variations of the same prompt related to their hackathon project.
- Test both prompts in an AI tool.
- Compare the AI-generated responses and analyze the differences.

Discussion Questions:

- Which prompt generated a more useful response?
- How did adding context or constraints change the AI's output?
- What adjustments would make the response even stronger?

Shaping AI's Voice

Role-Based Prompting

- Create a role-based prompt where you instruct the AI to act as:
  - A teacher mentor
  - A curriculum designer
  - A school administrator
  - An AI ethics consultant
- Input the same question but modify the role perspective (e.g., "Act as a mentor coaching a new teacher on AI use in the classroom").
- Compare how the AI adjusts its response based on the role given.

Key Takeaways

- **Be Clear & Specific** – Define the request precisely.
- **Add Context** – Who is the audience? What is the goal?
- **Use Structured Formatting** – Bullet points, step-by-step instructions, or constraints improve responses.
- **Iterate & Test** – Refine prompts based on AI responses.

Hackathon Work Session 3

Continue Development

Objective: Continue refining and developing your AI-driven solution.

Process:

- Deepen development—build, test, and refine.
- Address any challenges surfaced in peer feedback and the learning lab.
- Push forward and make tangible progress.

Group Discussion 2

Designed by Freepik

Balancing AI's Potential with Ethical Considerations

Objective: Examine ethical considerations of AI in education and reflect on how solutions promote responsible AI use.

Discussion Focus:

- How do AI tools impact **academic integrity and assessment?**
- What are the risks and benefits of AI in education?
- How can your team ensure **ethical and responsible** AI use?

This discussion will help you **refine your project's ethical considerations.**

Hackathon Work Session 4

Refinement & Testing

Iterate, Test, and Strengthen Your Solution

Objective: Teams will refine their AI solution, test usability, and troubleshoot challenges.

Process:

- Iterate on your solution based on new insights.
- Conduct testing to assess usability.
- Work with facilitators for support.

This session is about fine-tuning your solution before the next round of peer feedback.

Peer Review 2

Testing & Troubleshooting

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Final Peer Feedback Before Final Adjustments

Objective: Teams will present progress, gather usability feedback, and make adjustments.

What to Share:

- Solution overview & progress so far
- Key questions & challenges you're facing
- Areas where feedback would be most helpful

Peer Review 2

Testing & Troubleshooting

Guided Feedback Prompts:

- Is the solution clear and easy to use?
- Are there any technical or ethical concerns?
- What is one improvement suggestion before finalizing?

This is your last major peer check-in—use the feedback wisely.

Soft Close & Hackathon Work Session 5

Final Adjustments

Bringing It All Together

Objective: Teams will finalize their AI solution based on all feedback received.

Process:

- Make final refinements and ensure the solution is presentation-ready.
- Soft close at 5:00 PM – Teams can continue informal collaboration as needed.

Closing

Your Feedback is Important to Us!

Tomorrow:

- Wear Your Spirit Wear!

Dinner on Your Own

- Check your folder for suggestions