



**EXPLORING THE USE OF GENERATIVE ARTIFICIAL
INTELLIGENCE (GENAI)
TO MAXIMIZE DOCTORAL LEARNING EXPERIENCES**

Funded by NU's Cause Research Institute

Grant Recipient: Lori Demeter

COLPS

“WHAT’S YOUR X” SEED GRANT

Funded by NU Cause Research Institute (CRI)

- THANK YOU to CRI and COLPS
- CRI: NU’s continued commitment to social justice, equity, diversity, and inclusion (S-JEDI) by enriching the student experience and broadening research and scholarship opportunities for faculty and students.
- 1 of 11 \$5,000 seed grants awarded (grant period of July-December 2024)
- Simple Application Process

“WHAT’S YOUR X” SEED GRANT

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Why I chose the topic:

- Many students use AI – let’s encourage its positive use
- Significant potential to help students when used appropriately
- Great disparity of student knowledge and preparedness with students in DIS9901A
- Potential to present and interact key concepts and learning in a different medium to reinforce learning
- Limited research had been conducted specifically on using GenAI in higher education dissertation research and its potential to enhance student engagement and dissertation development success

“WHAT’S YOUR X” SEED GRANT

Dissertation Assistant for Research and Academia - DARA

- Outside vendor to build and house the module for the grant.
- I provided the module content, and vendor inserted the Chat GPT-like features that allowed participants to interact with the module’s information and questions.
- DARA’s content was very basic – it used CMP course topics such as explaining concepts as the qualitative method, quantitative method, what is a research problem, purpose, research question and alignment.

D.A.R.A.
Meet Dara, your Dissertation Assistant for Research and Academia. Generate your Research Problem, Purpose Statement, and Research Question in 5-10 minutes with Dara's consultative approach.

Hello! I'm Dara, your Dissertation Assistant for Research and Academia. Together, we'll identify your Research Problem, Purpose Statement, and Research Question. Let's get started!

start 

Welcome! Im Dara, your Dissertation Assistant for Research and Academia. Im here to support you through this exciting journey.

Well work together to identify your Research Problem, Purpose Statement, and Research Question. This will take around 5-10 minutes.

Lets begin. Are you ready to start?

1. Yes
2. No

“WHAT’S YOUR X” SEED GRANT

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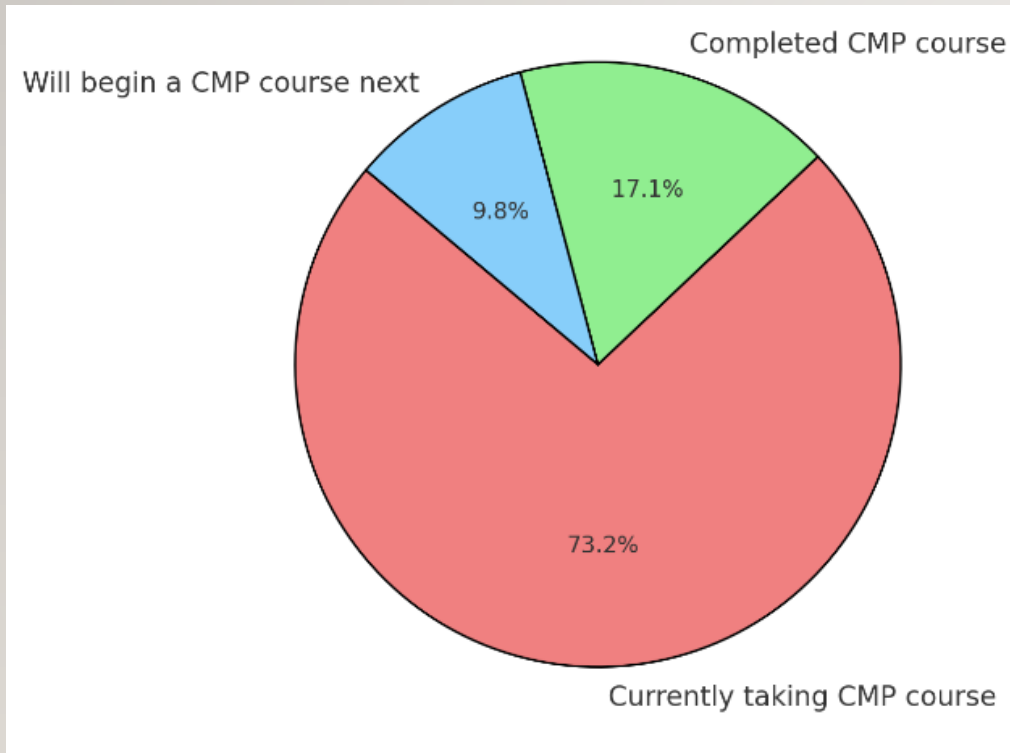
- Qualitative approach to investigate the use of generative artificial intelligence (GenAI) to personalize and maximize learning experiences for graduate DPA and DCJ students.
- Forty-one DPA and DCJ (17 DPA and 24 DCJ) students who were currently taking CMP or recently completed CMP were recruited via email.
- Interested participants completed a brief learning module (DARA) that utilized a GenAI reinforcement algorithm.
- Students then completed a short survey via Qualtrics regarding experiences and insights and received \$25 Amazon egift card for their time.

DEMOGRAPHICS - AGE

Of the 41 participants, over two-thirds (68%) were aged 18-35, with almost half (19, or 46%) of all participants being aged 18-25.

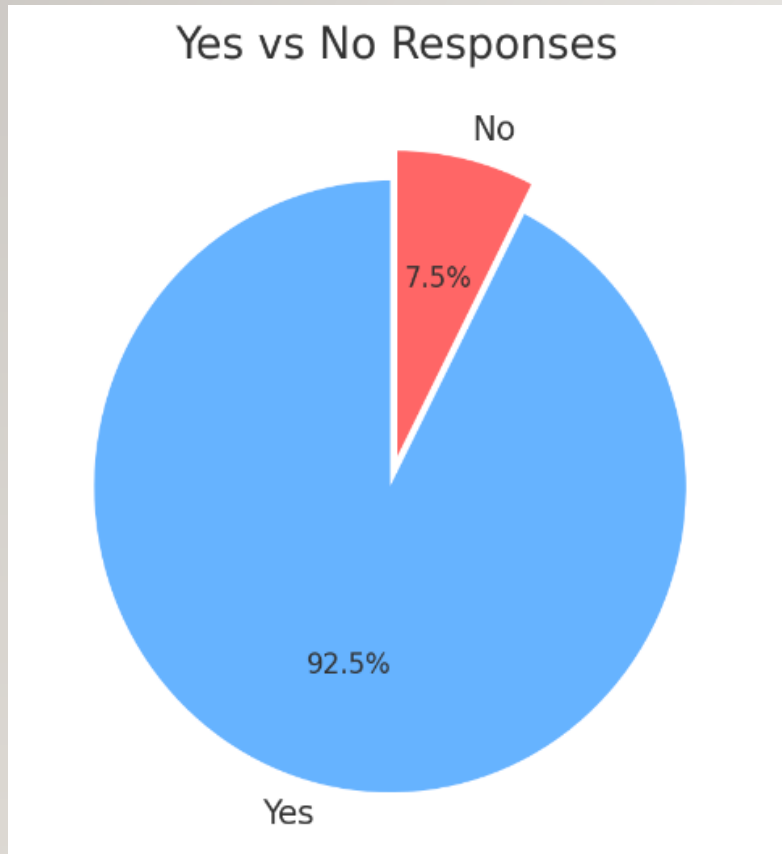
Age Range	Number of Participants
18-25	19
26-35	9
36-45	4
46-55	6
56-65	3

COURSE PLACEMENT



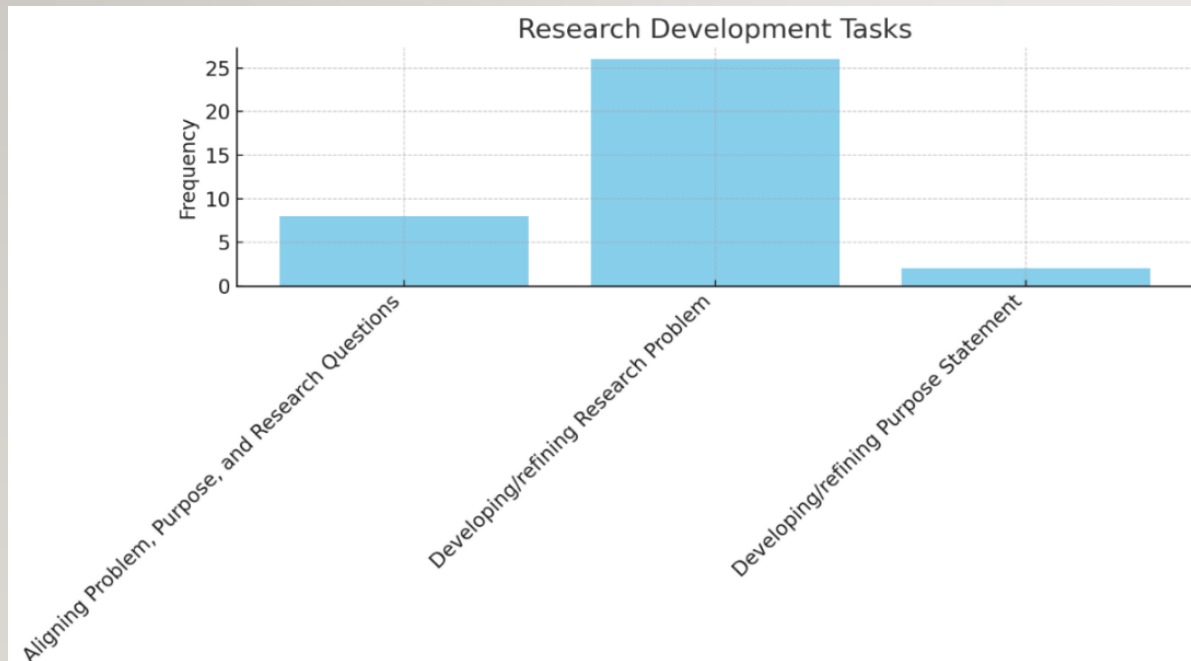
The majority of students (30 of 41, or 73%) were currently taking the CMP course, while 7 students (17%) had completed the CMP course, and 4 students (10%) will begin the CMP course within the next three months

RESULTS – PERCEIVED USEFULNESS



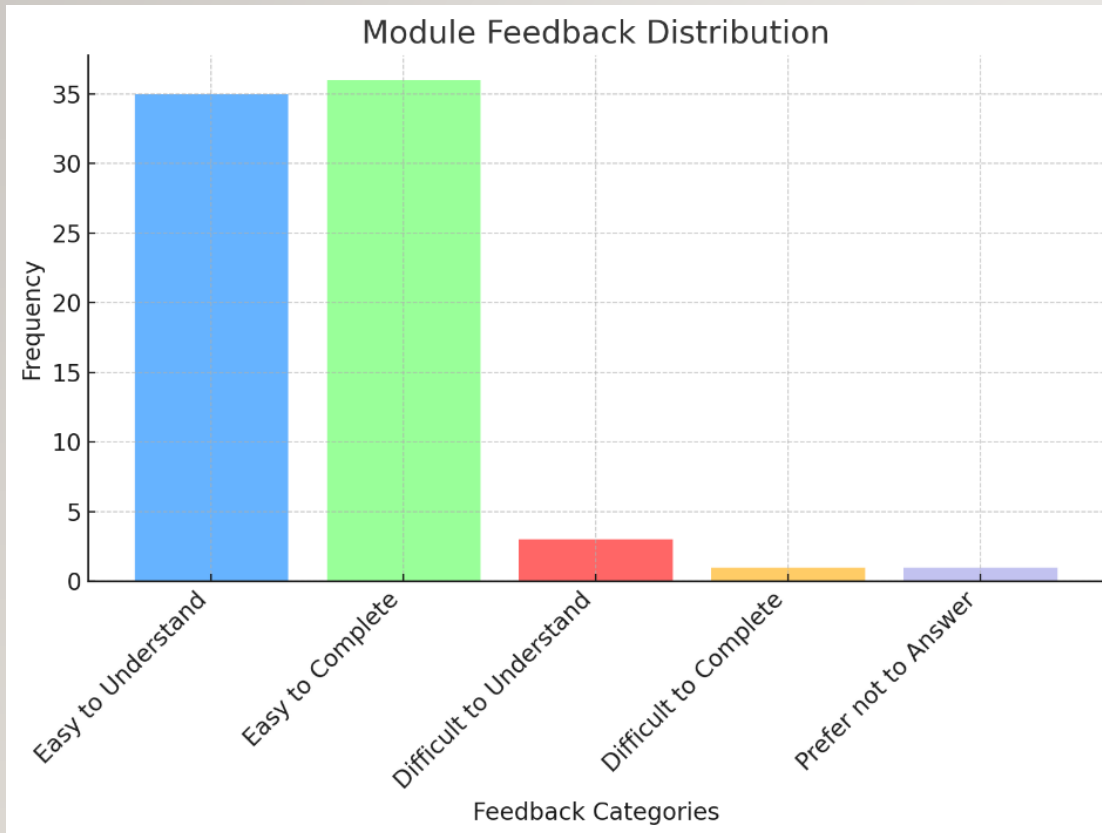
Regarding the usefulness of the DARA tool, the vast majority of students (37 of 41, or 90%) indicated that the module helped them in developing and/or aligning their problem, purpose, and research question[s].

RESULTS – MOST HELPFUL ASPECT



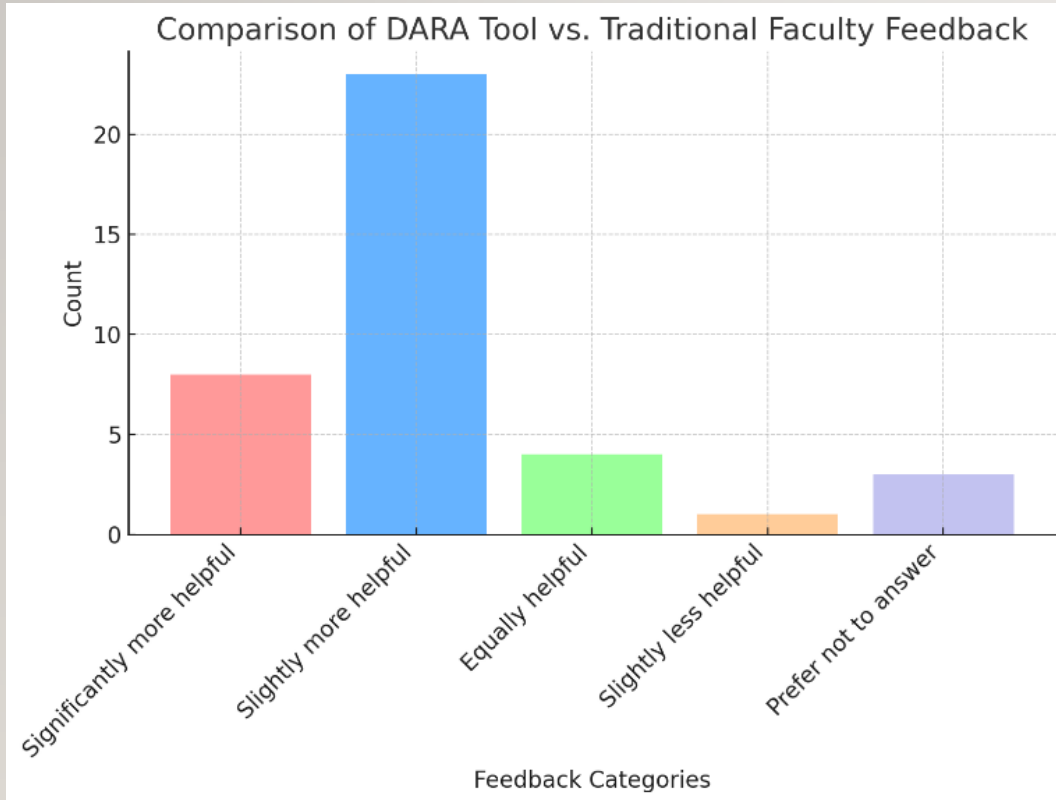
Regarding the *most* helpful aspect of the DARA tool, the majority of students (26 of 36, or 72%) indicated that assistance in developing their own research problem.

RESULTS – EASE OF USE



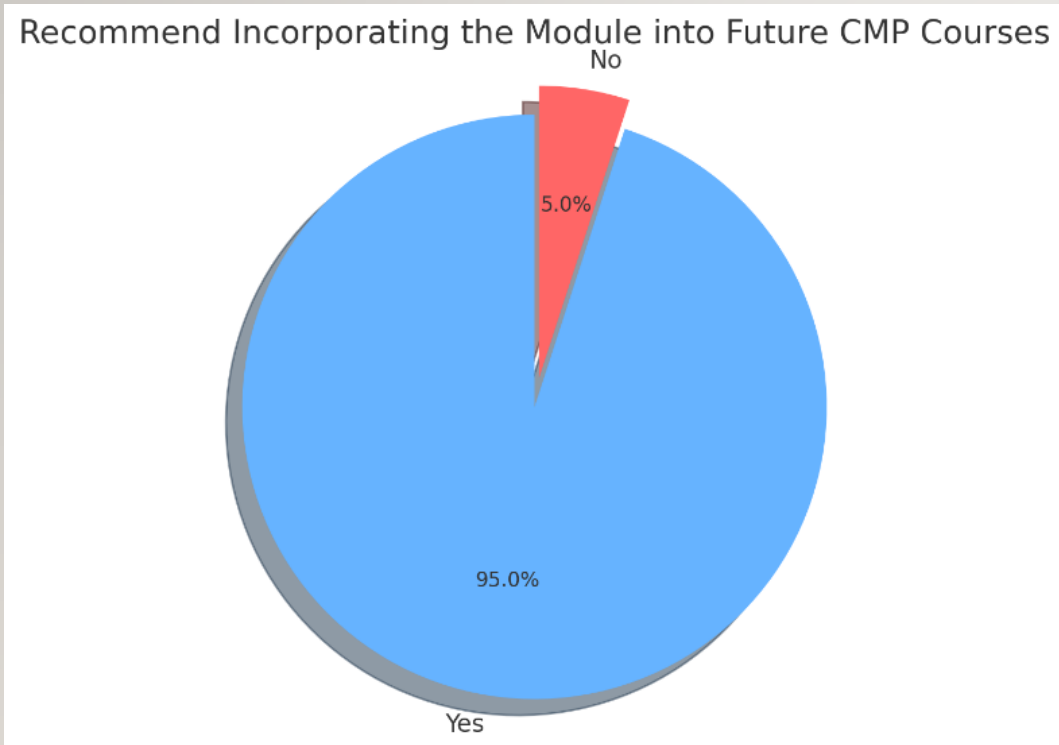
- 35 students indicated that the module was easy to understand
- 36 stated the module was easy to complete.
- 3 students reported that the module was difficult to understand
- 1 indicated it was difficult to complete.

RESULTS – COMPARISON TO FACULTY FEEDBACK



- 86% indicated that use of the DARA tool was more useful than traditional faculty feedback.
- Reasons cited included: feedback was almost instantaneous, the tool allowed for several iterations of wording components as problem and purpose, and there was no perceived judgement on the quality of components, so the student felt more at ease working through the research problems.

RESULTS – RECOMMEND ITS USE?



The final survey question asked students if they would recommend incorporating the DARA tool into a future course. Almost all students (38 of 40, or 95%) indicated 'Yes', while two students indicated 'No' to the question. One student did not respond.

IMPLICATIONS

- Findings support that GenAI tools have the potential to enhance student engagement and dissertation development success in graduate learning. Feedback from graduate DPA and DCJ students indicated that the DARA tool was quite helpful in several ways.
- Students perceived the module helped them in developing and/or aligning their problem, purpose, and research question[s], with it being most helpful in defining the research problem.
- A majority of students indicated that use of the DARA tool was more useful than traditional faculty feedback, and the real-time, interactive nature was a reason cited by several students. Tool could serve as a helpful compliment to faculty feedback.
- Potential future implications include enhancing current learning capacity by piloting tools as these for enhanced feedback and dissertation research progress.

RECOMMENDATIONS

- Expanding the study to a larger audience.
- Use interviews for richer feedback.
- Consider incorporating the module and survey into a pilot CMP course itself to gain further feedback and insights.
- Piloting the tool in the DIS-9901 course may also prove useful for students who are just beginning the formal dissertation process.

LESSONS LEARNED

- Expense and limited access by using outside vendor
- Consider researcher time needed in budget
- Controls to assure participant criteria met

**THANK YOU
AND ANY QUESTIONS?**

**THANK YOU AGAIN TO CRI!
[HTTPS://WWW.NU.EDU/CAUSERESEARH/](https://www.nu.edu/causeresearch/)**