PHI 805-22: Faith-Learning Integration and Interdisciplinary Studies

Loreatta Evans

Omega Graduate School

September 7, 2024

Professor: David, ward

Loretta, great job on your developmental reading log for PHI 805-22! You chose relevant sources that were in line with the interdisciplinary side of the course Essential Elements. That was great. The sources you selected seemed to give you a broader perspective about how all learning and research is interdisciplinary in applied areas like our students' professional work.

Quote/Paraphrases: Your sources and Quote/Paraphrases are well chosen.

Essential Elements: You did a good job identifying the Essential Element each reading related to which was interdisciplinary research.

Additive/Variant Analyses: Your Additive/Variant Analyses demonstrated critical thinking.

Contextualization: Your Contextualizations showed relevant applications to your field of healthcare.

Works Cited: Your selected readings are from appropriate and current scholarly sources. Your log excellently conforms to APA style.

Overall, nice work! -- Prof. David Ward

Source One: **Zhao, Z., Qing, Y., Kong, L., Xu, H., Fan, X., Yun, J., ... & Wu, H. (2024). Advancements in microwave absorption motivated by interdisciplinary research. *Advanced Materials*, *36*(4), 2304182.**

Comment 1: Quote/Paraphrase: “Advancements in microwave absorption motivated by interdisciplinary research” (Zhao et al., 2024, p. 1).

Essential Element: This article emphasizes transdisciplinary microwave absorption technology development.

Additive/Variant Analysis: This work shows that collaboration with materials science and applied physics experts has advanced microwave absorption.

Contextualization: In new technologies like microwave absorption, multidisciplinary methodologies are needed to overcome complicated challenges and innovate.

Comment 2: Quote/Paraphrase: “The paper illustrates how collaborative efforts across fields lead to novel applications and improvements in material properties” (Zhao et al., 2024, p. 5).

Essential Element: The essay discusses how multidisciplinary research may increase material quality and offer new applications.

Additive/Variant Analysis: The authors believe multidisciplinary techniques can lead to greater technical achievements than traditional methods.

Contextualization: This remark contextualizes the study by explaining how transdisciplinary research might expedite technological growth in particular domains.

Source Two: **Kusters, R., Misevic, D., Berry, H., Cully, A., Le Cunff, Y., Dandoy, L., ... & Wehbi, F. (2020). Interdisciplinary research in artificial intelligence: challenges and opportunities. *Frontiers in big data*, *3*, 577974.**

Comment 3: Quote/Paraphrase: “Interdisciplinary research in artificial intelligence: challenges and opportunities” (Kusters et al., 2020, p. 1).

Essential Element: Interdisciplinary AI research teams have pros and cons, as the essay shows.

Additive/Variant Analysis: It compares interdisciplinary study's benefits, such as comprehensive problem-solving, against its shortcomings, such as communication concerns.

Contextualization: Interdisciplinary collaboration may be needed to solve complicated AI challenges, and this site reviews the field's developing environment.

Comment 4: Quote/Paraphrase: “Collaboration across disciplines is essential for tackling complex problems in AI but presents significant challenges in terms of integration and communication” (Kusters et al., 2020, p. 8).

Essential Element: The merits and downsides of AI multidisciplinary research are well summarized in this statement.

Additive/Variant Analysis: Through its analysis of communication and integration issues, the work enhances our knowledge of interdisciplinary research.

Contextualization: The issues outlined are likely familiar to multidisciplinary AI researchers, and the answers are practical methods to increase collaboration.

Source Three: **Dalton, A., Wolff, K., & Bekker, B. (2022). Interdisciplinary research as a complicated system. *International Journal of Qualitative Methods*, *21*, 16094069221100397.**

Comment 5: Quote/Paraphrase: “Interdisciplinary research as a complicated system” (Dalton et al., 2022, p. 1).

Essential Element: The paper highlights the complexity of multidisciplinary research using a complex system metaphor.

Additive/Variant Analysis: The authors theoretically view the complicated system with numerous components in multidisciplinary research frameworks.

Contextualization: This theoretical lens may help establish better research methods and cooperative ventures by helping to understand interdisciplinary study's complexity.

Comment 6: Quote/Paraphrase: “The paper explores how the interactions and feedback loops between disciplines create a dynamic and sometimes unpredictable research environment” (Dalton et al., 2022, p. 3).

Essential Element: Feedback loops and dynamic interactions in multidisciplinary research systems are discussed here.

Additive/Variant Analysis: Feedback loops add complexity to multidisciplinary research as compared to simpler research models.

Contextualization: Researchers must comprehend these links to navigate and profit from transdisciplinary cooperation.

Source Four: **Følstad, A., Araujo, T., Law, E. L. C., Brandtzaeg, P. B., Papadopoulos, S., Reis, L., ... & Luger, E. (2021). Future directions for chatbot research: an interdisciplinary research agenda. *Computing*, *103*(12), 2915-2942.**

Comment 7: Quote/Paraphrase: “Future directions for chatbot research: an interdisciplinary research agenda” (Følstad et al., 2021, p. 1).

Essential Element: The essay presents an interdisciplinary chatbot research framework.

Additive/Variant Analysis: It suggests combining computer science, psychology, and languages to improve chatbot technology.

Contextualization: This study underlines the need of incorporating knowledge from many domains to innovate robot design.

Comment 8: Quote/Paraphrase: “Addressing the limitations of current chatbot technologies requires input from diverse disciplines to enhance functionality and user experience” (Følstad et al., 2021, p. 4).

Essential Element: Given chatbot technology's limitations, this statement emphasizes the necessity for several perspectives to solve problems.

Additive/Variant Analysis: Interdisciplinary research to improve functionality and user experience shows that collaboration may lead to better technology solutions.

Contextualization: This supports the premise that building chatbots involves multidisciplinary methods, which follow technology changes.

Source Five: **Lepore, D., Dolui, K., Tomashchuk, O., Shim, H., Puri, C., Li, Y., ... & Spigarelli, F. (2023). Interdisciplinary research unlocking innovative solutions in healthcare. *Technovation*, *120*, 102511.**

Comment 9: Quote/Paraphrase: “Interdisciplinary research unlocking innovative solutions in healthcare” (Lepore et al., 2023, p. 1).

Essential Element: This post examines how multidisciplinary research advances healthcare innovation.

Additive/Variant Analysis: The article uses real-world examples to show how multidisciplinary research may lead to creative healthcare solutions.

Contextualization: This article shows how multidisciplinary research may solve difficult healthcare problems.

Comment 10: Quote/Paraphrase: “The integration of diverse disciplinary perspectives has led to significant advancements in treatment methods and healthcare technologies” (Lepore et al., 2023, p. 7).

Essential Element: This quotation emphasizes how multidisciplinary research improves healthcare technology and therapies.

Additive/Variant Analysis: This focus on practical improvements suggests that multidisciplinary collaboration can have real-world advantages.

Contextualization: We should study this work to see how multidisciplinary research might enhance healthcare results.

Source Six: **Sun, Y., Livan, G., Ma, A., & Latora, V. (2021). Interdisciplinary researchers attain better long-term funding performance. *Communications Physics*, *4*(1), 263.**

Comment 11: Quote/Paraphrase: “Interdisciplinary researchers attain better long-term funding performance” (Sun et al., 2021, p. 1).

Essential Element: This study found that transdisciplinary research improves long-term finance.

Additive/Variant Analysis: Comparing interdisciplinary versus non-interdisciplinary research funding shows the financial benefits of collaborative techniques.

Contextualization: Interdisciplinary research is financially rewarded by the findings, which may influence financing and research goals.

Comment 12: Quote/Paraphrase: “Long-term funding success is enhanced by the ability of interdisciplinary teams to tackle a broader range of research questions” (Sun et al., 2021, p. 4).

Essential Element: According to popular thinking, funding outcomes improve with the ability to pursue varied research areas.

Additive/Variant Analysis: The article's premise on multidisciplinary teams' research problems adds strategic depth to financing talks.

Contextualization: Researchers and organizations contemplating transdisciplinary resource allocation can utilize this information.

**Works Cited**

Dalton, A., Wolff, K., & Bekker, B. (2022). Interdisciplinary research as a complicated system. *International Journal of Qualitative Methods*, *21*, 16094069221100397.

Følstad, A., Araujo, T., Law, E. L. C., Brandtzaeg, P. B., Papadopoulos, S., Reis, L., ... & Luger, E. (2021). Future directions for chatbot research: an interdisciplinary research agenda. *Computing*, *103*(12), 2915-2942.

Kusters, R., Misevic, D., Berry, H., Cully, A., Le Cunff, Y., Dandoy, L., ... & Wehbi, F. (2020). Interdisciplinary research in artificial intelligence: challenges and opportunities. *Frontiers in big data*, *3*, 577974.

Lepore, D., Dolui, K., Tomashchuk, O., Shim, H., Puri, C., Li, Y., ... & Spigarelli, F. (2023). Interdisciplinary research unlocking innovative solutions in healthcare. *Technovation*, *120*, 102511.

Purvis, B., Keding, H., Lewis, A., & Northall, P. (2023). Critical reflections of postgraduate researchers on a collaborative interdisciplinary research project. *Humanities and Social Sciences Communications*, *10*(1), 1-13.

Repko, A. F., & Szostak, R. (2020). *Interdisciplinary research: Process and theory*. Sage publications.

Sun, Y., Livan, G., Ma, A., & Latora, V. (2021). Interdisciplinary researchers attain better long-term funding performance. *Communications Physics*, *4*(1), 263.

Zhao, Z., Qing, Y., Kong, L., Xu, H., Fan, X., Yun, J., ... & Wu, H. (2024). Advancements in microwave absorption motivated by interdisciplinary research. *Advanced Materials*, *36*(4), 2304182.