

Teaching Strategies of AIMS Maritime Professors Under the Online Teaching Mode: A Best Practice Approach Using Three-Domain Theories

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Abstract

This study assessed the teaching strategies of AIMS maritime professors under the lens of three-domain teaching strategy theories: Behaviorism; Cognitivism; and, Social Constructivism. The relationship between the teaching strategies and the demographic profiles (age, years of teaching experience, and highest educational attainment) was also determined to identify factors that could affect the teaching strategies of the respondents. Using descriptive-correlation design, the study endeavored to describe the teaching strategies of AIMS maritime professors. Using complete enumeration as a sampling technique, it included 30 non-laboratory maritime professors. To gather the data, a researcher-made questionnaire was used. An online platform of the questionnaire was made through Google forms. The questionnaire was distributed to the professors after ensuring the permit via Microsoft Teams Software, FB messenger, or Google mails. To treat the data, the following statistical tools were used: percentage; weighted mean; and chi-square. Results indicated that the maritime professors highly utilized the Direct Instruction Strategy (M=4.41) under the Behaviorism Theory. This was followed by Flipped Instruction Strategy (M=3.96) under the Social Constructivism Theory; and, Chunking Instruction Strategy (M=3.93) under Cognitivism Theory. The chi-square result indicated no significant relationship between the teaching strategies and demographic profiles of the maritime professors.

Keywords: *AIMS Maritime Professors, online teaching, teaching strategies, three-domain theories*

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Introduction

During the Covid-19 pandemic, the abrupt transformation from face-to-face classes to online learning mode has created a problem in the teaching strategy of professors. Much to the effect created on learners, the situation has elicited deeper dilemma to professors who are used to delivering lessons in person. An inventory of available teaching strategies suited for online is therefore vital at this point in time. However, among the lists of teaching strategies, which can be considered as a best practice strategy and can be adopted for online learning? To meet the purpose of the study, the researchers assessed the teaching strategies of AIMS maritime professors under the lens of three-domain teaching strategy theories: Behaviorism; Cognitivism; and, Social Constructivism. The relationship between the teaching strategies and the demographic profiles (age, years of teaching experience, and highest educational attainment) was also determined to identify factors that could affect the teaching strategies of the respondents.

Methodology

Using descriptive-correlation research design, data were obtained from AIMS maritime professors (N=30) using a modified questionnaire anchored from the “List of Teaching Strategies with Theoretical Link” of Chris Drew (2019). An online version of the questionnaire (Google forms) was made for easy distribution via social media and email. Employing Statistical Package for Social Sciences (SPSS, version 20) in analyzing the data, statistical results were elicited using percentage, weighted mean, and chi-square.

Findings

Results indicated that the maritime professors highly utilized the Direct Instruction Strategy (M=4.41) under the Behaviorism Theory. This was followed by Flipped Instruction Strategy (M=3.96) under the Social Constructivism Theory; and, Chunking Instruction Strategy (M=3.93) under Cognitivism Theory. The chi-square result indicated no significant relationship between the teaching strategies and demographic profiles of the maritime professors.

Conclusion

The respondents have generally applied the three-domain teaching strategies in their online teaching with a distinct utilization of the Direct Instruction Strategy (Behaviorism Theory). Practical application of the results can be adopted to maximize the delivery of

instructions. An assessment of student performance instructed under the three strategies is recommended to determine the effectiveness of the three-domain teaching strategies.

References

- Albright, D. (2021, April 8). *The Top 5 Online Teaching Strategies for Success Uscreen*. Retrieved May 20, 2021, from <https://www.uscreen.tv/blog/list-of-online-teaching-strategies/>.
- Arinto, P. (2016). Issues and Challenges in Open and Distance e-Learning: Perspectives from the Philippines. *The International Review of Research in Open and Distributed Learning*. Volume 17, Number 2
- Bao, W. (2020). COVID –19 and online teaching in higher education: A case study of Peking University. *Human Behaviour and Emerging Technologies*, 2(2), 113– 115.
- Brau, B., Brau, & Kimmons, R. (1970). *Constructivism. The Students' Guide to Learning Design and Research*. Retrieved July 22, 2021 from <https://edtechbooks.org/studentguide/constructivism#:~:text=Dewey%20emphasizes%20inquiry%20and%20the,to%20serve%20as%20a%20facilitator>.
- Behaviorism. Online Learning Theories. (n.d.). Retrieved July 22, 2021 from <https://esanderslearningtheories.weebly.com/behaviorism.html>.
- Campus Technology (2021). *How COVID-19 Created Opportunities for Teachers and Students* (2021). Retrieved May 20, 2021, from <https://campustechnology.com/articles/2021/05/05/how-covid-19-created-opportunities-for-teachers-and-students.aspx>
- Castelo, M. (2020). *The State of Educational Technology in a Post-Pandemic World*. Technology Solutions That Drive Education. Retrieved May 20, 2021, from <https://edtechmagazine.com/k12/article/2020/11/state-educational-technology-post-pandemic-world>
- CHED Memorandum Order No. 67. (2017). *Revised Policies, Standards and Guidelines for the Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in*

- Marine Engineering (BSMarE) Programs.* Retrieved May 27, 2021, from <https://ched.gov.ph/wp-content/uploads/2017/10/CMO-67-s.-2017.pdf>
- Cognitivism Applied to Distance Education. (n.d.). Retrieved July 21, 2021 from http://www.amandaszapkiw.com/artifacts/EDUC633_eXe_Module_2/cognitivism_applied_to_distance_education.html.
- Cooper, S. (2021). *5 Strategies To Improve Your Online Teaching.* Fagee Learning Industry. Retrieved May 20, 2021, from <https://elearningindustry.com/5-strategies-improve-your-online-teaching>.
- Drew, C. (2019). A List of 107 Effective Classroom Teaching Strategies. *Helpful Professor.* Retrieved on July 22, 2021 from helpfulprofessor.com
- Fageeh, A. (2011). EFL student's readiness for e-learning: Factors influencing e-learners acceptance of the blackboard in a Saudi university. *Jalt Call Journal*, 7(1), 19– 42.
- Goldberg, M. (2017). *Does eLearning Work in the Maritime Industry - MarineLS.* Marine Learning Systems. Retrieved May 20, 2021, from <https://www.marinelms.com/elearning-work-maritime-industry/>.
- Inside Higher Ed. (n.d.). *Teaching Online in the COVID Crisis: What We Have Learned.* Retrieved May 20, 2021, from <https://www.insidehighered.com/digital-learning/blogs/online-trending-now/teaching-online-covid-crisis-what-we-have-learned>.
- Joaquin, J. J. B., Biana, H. T., & Dacela, M. A. (2020). *The Philippine Higher Education Sector in the Time of COVID-19.* *Front. Educ.* 5:576371. doi: 10.3389/educ.2020.576371
- Lapitan, L. D. S., Tiangco, C. E., Sumalinog, D. A. G., Sabarillo, N. S., & Diaz, J. M. (2021). An effective blended online teaching and learning strategy during the COVID-19 pandemic. *Education for Chemical Engineers.* Volume 35, April 2021, Pages 116-131. <https://doi.org/10.1016/j.ece.2021.01.012>
- Marquez, L. P., Olivar, M. V. V., Brijuega, C. E., Ombao, R. P., Cerio, W. C., & Baes, F. D. (2020). Experiences and insights from a developing country. *Education and COVID-19*, 40, 84–90. <https://doi.org/10.46786/ac20.5188>

- McDougall, A. (2021). *Lessons Learned from Teaching during the Pandemic*. Education Next. Retrieved May 20, 2021, from <https://www.educationnext.org/lessons-learned-teaching-during-the-pandemic/>
- Moralista B. and Oducado F., R. R. (2020). Faculty Perception toward Online Education in a State College in the Philippines during the Coronavirus Disease 19 (COVID-19) Pandemic. *Universal Journal of Educational Research*. Vol. 8(10), pp. 4736 – 4742. DOI: 10.13189/ujer.2020.081044
- Paneda, M. G. (2021). *PUP-COC on 'new normal': How college instructors adapt to distance learning in teaching media-related subjects*. The Manila Times. Retrieved May 20, 2021, from <https://www.manilatimes.net/2021/02/11/campus-press/pup-coc-on-new-normal-how-college-instructors-adapt-to-distance-learning-in-teaching-media-related-subjects/839439/>.
- Ralph, M. (2020). *Teaching Strategies of Award-Winning Online Instructors*. Edutopia. Retrieved May 20, 2021, from <https://www.edutopia.org/article/teaching-strategies-award-winning-online-instructors>.
- Smith, M., & Diaz, A. W. (2004). Increasing students' interactivity in an online course. *The Journal of Interactive Online Learning*, 2(3), 1– 26.
- The Maritime Executive (2020). *COVID-19 Accelerates Shift to Online Maritime Education*. The Maritime Executive. Retrieved May 20, 2021, from <https://www.maritime-executive.com/article/covid-19-accelerates-shift-to-online-maritime-education>.
- Tria, J. Z. (2020). The COVID-19 Pandemic through the Lens of Education in the Philippines: The New Normal. *International Journal of Pedagogical Development and Lifelong Learning*, 1(1), ep2001. <https://doi.org/10.30935/ijpdll/8311>
- Turk, M. (2021). Co Facilitated Discussions to Truly Engage Your Online Students with Course Content: Faculty Focus. Faculty Focus. Higher Ed Teaching & Learning. Retrieved May 20, 2021, from <https://www.facultyfocus.com/articles/online-education/online-student-engagement/co-facilitated-discussions-to-truly-engage-your-online-students-with-course-content/>.