

# DISTANCE EDUCATION LEARNING AND ENGAGEMENT STRATEGIES IN AN ONLINE LEARNING ENVIRONMENT OF THE STUDENTS

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## **Abstract**

This study aimed to determine the level of distance education learning and engagement strategies in an online environment of the students. This study utilized the non-experimental quantitative research design using descriptive technique involving teachers in Sarangani District, Davao Occidental Division, Philippines. The study was conducted on the second semester of school year 2021-2022. Research instruments on distance education learning was used as source of data. Using mean as statistical tool to treat the data, the study showed the following results: distance education learning in terms of instructor support is very high; level of distance education learning in terms of personal relevance is high; the level of engagement strategies in an online learning environment in terms of learner to content, learner to teacher and learner to learner is very high; the overall level of engagement strategies in an online learning environment is very high.

**Keywords:** Distance Education Learning Environment, Engagement Strategies, Online Learning Environment, Educational Management

## **INTRODUCTION**

The absence of face-to-face teaching and learning prompted the education sector to look for alternatives to continue offering education and make it accessible to all. Among the options provided is distance learning education. This modality is a form of education in which the main elements include physical separation of teachers and students. In this format of teaching and learning, the use of various technologies to facilitate student-teacher and student-student communication play a significant role in the instruction (Bijeesh, 2017).

The educational learning landscape has dramatically changed over the years. As a manifestation, various changes have been implemented to consistently offer relevant education that addresses the growing needs of the learners. However, as the world is facing an unprecedented global health crisis brought by the pandemic, the education sector responds effectively through various innovations. This is innovations are breakthroughs designed to continue education amidst the health crisis and make it accessible to all students.

One of these modalities is online learning which offers remote education right at the comfort of the home of the students (Firat, 2016). Students in an online learning environment must have both skills and strategies to navigate the new learning platform that is almost alien to them. As such, the students must be competent in utilizing engagement strategies in a virtual learning environment. However, given the limitations, these students are seen unprepared for the virtual classroom. As a result, the students are struggling in terms of establishing a learner-to-learner engagement while the class is ongoing (Yang, Lavonen & Niemi, 2018).

One of the issues face by the students in an online learning environment is the use a virtual lounge where they can meet informally to share common interests. Teachers have not designed a virtual lounge dedicated to students where they can share their ideas about the lesson of the day. As a result, learning has become limited and interaction has been inadequate (Dewan, Murshed & Lin, 2019).

Also, many from these students admit that they have difficulty in trying to relate ideas in their subject to those in another course whenever possible. In the local context, there are students who feel that when they study for their class, and pull together information from different sources, such as lectures, readings, and discussions, they still feel that there is still lacking materials to read despite the available resources they have at hand.

The problem-situations narrated are the common experiences among students who are in the distance education. The researcher finds it relevant to address the concern of the students in order to minimize if not stop the problem they experience in distance learning. Hence, the researcher is prompted to conduct this study to address the knowledge gap as the researcher has rarely come across with the same study on the same topic in the local setting.

## **RESEARCH METHOD**

This study employed the non-experimental quantitative research design utilizing correlational technique. A substantial proportion of quantitative educational research is non-experimental because many important variables of interest are not manipulable. Because non-experimental research is an important methodology employed by many researchers, it is important to use a classification system of non-experimental methods highly descriptive of what we do and which also allows us to communicate effectively in an interdisciplinary research environment. Correlational research designs evaluate the nature and degree of association between two naturally occurring variables.

This study utilized convenient sampling in determining the sample of this study. Only those students who manifested their willingness to participate in the research were included in the study. These students signed the Informed Consent to show their voluntary participation of the study.

## RESULT AND DISCUSSION

### Level of Distance Education Learning Environment

Presented in Table 1 is the level of distance education learning environment with an overall mean of 3.54 with a descriptive equivalent of high, indicating that all enumerated indicators were often observed. The overall mean was the results obtained from the mean of the indicators for the specific items from the questionnaire intended for this particular indicator as appended in this study. Among the enumerated indicators, *Instructor Support* obtained the highest mean of 4.22 with a descriptive rating of *very high*.

The strands of this indicator were as follows: If I have an inquiry, the teacher finds time to respond, the teacher helps me identify problem areas in my study, the teacher responds promptly to my questions, the teacher gives me valuable feedback on my assignments, the teacher adequately addresses my questions.

*Personal Relevance* obtained a mean score of 3.87 or *high*. The strands of this indicator were as follows: I am able to pursue topics that interest me, I can connect my studies to my activities outside of class, I apply my everyday experiences in class, I apply my out-of-class experience, I link class work to my life outside of school.

*Student Interaction and Collaboration* had a mean rating of 3.67 or *high*. The strands of this indicator were as follows: I work with others, I share information with other students, I discuss my ideas with other students, I relate my work to others' work, I collaborate with other students in the class.

*Student Autonomy* obtained a mean rating of 3.17 or *moderate*. The strands of this indicator were as follows: I make decisions about my learning, I work during times that I find convenient, I am in control of my learning, I play an important role in my learning, I approach learning in my own way.

*Authentic Learning* obtained a mean rating of 3.16 or *moderate*. The strands of this indicator were as follows: I study real example related to the class, I use real facts in class activities, I work on assignments that deal with real-world information, I work with real examples, I enter the real world of the topic of study.

The high level of distance education learning environment is due to the high level of rating given by the respondents to the indicators *Student Interaction and Collaboration* and *Personal Relevance*.

The above practice of teachers are expected to increase the practice on distance education learning environment congruent with the views of various authors such as Aydemir, Özkeskin & Akkurt (2015) who stated that distance education learning environment has a direct correlation on engagement strategies in an online learning environment of students. This means that when distance education learning environment creates meaningful learning opportunities to students, the engagement strategies in an online learning environment will also increase.

Table 1  
*Level of Distance Education Learning Environment*

| <b>Indicators</b>                     | <b>SD</b>    | <b>Mean</b> | <b>Descriptive Level</b> |
|---------------------------------------|--------------|-------------|--------------------------|
| Instructor Support                    | 0.563        | 4.22        | Very High                |
| Student Interaction and Collaboration | 0.598        | 3.67        | High                     |
| Personal Relevance                    | 0.604        | 3.87        | High                     |
| Authentic Learning                    | 0.573        | 3.16        | Moderate                 |
| Student Autonomy                      | 0.536        | 3.17        | Moderate                 |
| <b>Overall</b>                        | <b>0.529</b> | <b>3.54</b> | <b>High</b>              |

### **Level of Engagement Strategies in an Online Learning Environment**

Presented in Table 2 is the level of *Engagement Strategies in an Online Learning Environment*. Computations revealed an overall mean score of 4.30 or *very high*, indicating that the said respondents gave a *very high* rating. The score was derived from the mean scores of 4.37 or *very high* for Learner-to-Learner Engagement, 4.27 or *very high* for Learner-to-Content, 4.24 or *very high* for Learner-to-Teacher. The indicator of *Engagement Strategies in an Online Learning Environment* that got the highest rating was Learner-to-Learner Engagement.

The mean rating was taken from the strands in the indicator which are as follow: use a virtual lounge where they can meet informally to share common interests, interact with peers through student presentations, work collaboratively using online communication tools to complete case studies, projects, reports, and others, peer-review classmates' work, are required to rate individual performance of team members on projects.

Meanwhile, *Learner-to-Content* obtained a mean rating of 4.27 or *very high*. The result of this indicators was taken from the strands of the questionnaire which are the following: interact with content in more than one format (e.g., text, video, audio, interactive games, or simulations), Students work on realistic scenarios to apply content (e.g., case studies, reports, research papers, presentations, client projects), Discussions are structured with guiding questions and/or prompts to deepen their

Table 2  
*Level of Engagement Strategies in an Online Learning Environment*

| Indicator                     | SD           | Mean        | Descriptive Level |
|-------------------------------|--------------|-------------|-------------------|
| Learner-to-Learner Engagement | 0.618        | 4.37        | Very High         |
| Learner-to-Teacher            | 0.682        | 4.24        | Very High         |
| Learner-to-Content            | 0.618        | 4.27        | Very High         |
| <b>Overall</b>                | <b>0.031</b> | <b>4.30</b> | <b>Very High</b>  |

understanding of the content, Students research an approved topic and present their findings in a delivery method of their choice (e.g., discussions forum, chat, web conference, multimedia presentation), Students have an opportunity to reflect on important elements of the course (e.g., use of communication tools, their learning, team projects, and community).

On the other hand, *Learner-to-Teacher* obtained a mean rating of 4.24 or very high. The rating was taken from the strands of the indicators which include: provides students with an opportunity to reflect, posts grading rubrics for all assignments, uses various features in synchronous sessions to interact with students, refers to students by name in discussion forums, creates a forum for students to contact the instructor with questions about the course.

The very high level of engagement strategies in an online learning environment is due to the very high level of rating given by the respondents to the indicators learner-to-learner engagement, learner-to-teacher, and learner-to-content. These practices are expected to increase engagement strategies in an online learning environment.

These students use a virtual lounge where they can meet informally to share common interests, interact with peers through student presentations, provides students with an opportunity to reflect posts grading rubrics for all assignments, interact with content in more than one format (e.g., text, video, audio, interactive games, or simulations), Students work on realistic scenarios to apply content (e.g., case studies, reports, research papers, presentations, client projects).

### **Significance of the Relationship between Distance Education Learning and Engagement Strategies in an Online Learning Environment**

Illustrated in Table 3 were the results of the test of relationship between the variables involved in the study. The overall correlation had a computed r- value of 0.799 with a probability value of  $p < 0.01$  which is significant at 0.05 level. Doing an in-

Table 3  
*Significance of the Relationship between Distance Education Learning and Engagement Strategies in an Online Learning Environment*

| <b>Distance Education Learning Environment</b> | <b>Engagement Strategies in an Online Learning Environment</b> |                               |                               |                               |
|--|--|-------------------------------|-------------------------------|-------------------------------|
|  | Learner-to-Learner Engagement                                  | Learner-to-Teacher            | Learner-to-Content            | Overall                       |
| Instructor Support                             | .463*<br>(.000)  | .507*<br>(.000)               | .563*<br>(.000)               | .589*<br>(.000)               |
| Student Interaction and Collaboration          | .586*<br>(.000)  | .664*<br>(.000)               | .538*<br>(.000)               | .659*<br>(.000)               |
| Personal Relevance                             | .586*<br>(.000)  | .526*<br>(.000)               | .587*<br>(.000)               | .660*<br>(.000)               |
| Authentic Learning                             | .529*<br>(.000)  | .598*<br>(.000)               | .505*<br>(.000)               | .618*<br>(.000)               |
| Student Autonomy                               | .761*<br>(.000)  | .677*<br>(.000)               | .769*<br>(.000)               | .747*<br>(.000)               |
| <b>Overall</b>                                 | <b>.662*</b><br><b>(.000)</b>                                  | <b>.724*</b><br><b>(.000)</b> | <b>.709*</b><br><b>(.000)</b> | <b>.799*</b><br><b>(.000)</b> |

\*Significant at 0.05 significance level.

depth analysis, it could be gleaned that the indicators of distance education learning and engagement strategies in an online learning environment of the students revealed computed r-values ranging from .589 to .660 with probability values of  $p < 0.01$  which is lesser than .05 level of significance.

As evident in the table, the highest r-value and p-value for the correlation between distance education learning and engagement strategies in an online learning environment of the students was Student Autonomy with 0.747 and 0.000 probability value. The data implied that Student Autonomy was considered important attribute of engagement strategies in an online learning environment of the students. Personal Relevance was also significantly related to engagement strategies in an online learning environment of the students with computed r-value of 0.660 and p-value of  $p < 0.01$ .

Meanwhile Student Interaction and Collaboration was also significantly related to engagement strategies in an online learning environment of the students with r-value of 0.659 and p-value of  $p < 0.01$ . The other important predictor of engagement strategies in an online learning environment of the students was Authentic Learning as evidenced by the computed r-value of 0.618 with p-value of  $p < 0.01$ .

There is a significant relationship between distance education learning environment and engagement strategies in an online learning environment of students. The results of the study are also supported by the pronouncement of Aydemir, Özkeskin & Akkurt (2015) who stated that distance education learning

environment has a direct correlation on engagement strategies in an online learning environment of students. This means that when distance education learning environment creates meaningful learning opportunities to students, the engagement strategies in an online learning environment of students will also increase.

## CONCLUSION

With considerations on the findings of the study, conclusions are drawn in this section. The level of distance education learning environment is high, the level of engagement strategies in an online learning environment of students is high, there is a significant relationship between distance education learning and engagement strategies in an online learning environment of students.

The results of this study revealed that the level of distance education learning environment is high. The researcher recommends that the Schools Division Office of Davao Occidental may conduct training that will help improve on the aspects of authentic learning and student autonomy among the teachers to improve on this field.

Meanwhile, the study revealed that the level of engagement strategies in an online learning environment of students is very high. The researcher recommends that the district office may provide Learning Action Cell among the teachers on the topic learner-to-learner engagement, learner-to-teacher, and learner-to-content engagement to help students improve in this indicator.

The study found a significant relationship between distance education learning and engagement strategies in an online learning environment of students. The researcher therefore recommends that the Department of Education may consider the provision of trainings or activities relative to the variables under study to help the school heads and teachers enhance on the indicators which are among the lowest in the indicators of the variables under study. The researcher recommends that school heads may provide sessions in Learning Action Cell on this topic among teachers for improvement.

## REFERENCES

- Aydemir, M., Özkeskin E, E., & Akkurt, A. A. (2015). A theoretical framework on open and distance learning. *Procedia-Social and Behavioral Sciences*, 174(2015), 1750–1757. <https://doi.org/10.1016/j.sbspro.2015.01.833>
- Bijeesh, N. A. (2017). Advantages and disadvantages of distance learning. Retrieved from <http://www.indiaeducation.net/online-education/articles/advantages-and-disadvantages-of-distancelearning.html>
- Dewan, M., Murshed, M., & Lin, F. (2019). Engagement detection in online learning: a review. *Smart Learning Environments*, 6(1), 1-20. <https://link.springer.com/article/10.1186/s40561-018-0080-z>

- Firat, M. (2016). Measuring the e-learning autonomy of distance education students. *Open Praxis*, 8(3), 191–201. doi: <http://dx.doi.org/10.5944/openpraxis.8.3.310>
- Yang, D., Lavonen, J. M., & Niemi, H. (2018). Online Learning Engagement: Critical Factors and Research Evidence from Literature. *Themes in eLearning*, 11(1), 1-22. <https://eric.ed.gov/?id=EJ1204753>