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The Effectiveness of Online Guidance for Students' Thesis During the Covid-19 WFH Pandemic

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ABSTRACT
Research on online thesis guidance patterns has been carried out during the work from home pandemic Covid-19. The research subjects were 32 students. The research data has been reviewed and analyzed qualitatively and quantitatively. The results showed that all students (100%) followed Planning: the opening of online tutoring classes, inviting students to join by submitting the class access code via WhatsApp group facility or email group; students claim to join, and Pre-coaching: classroom instruction is given, provide assignment instructions by setting a deadline for submission of assignments. The mentoring process: conducting class discussions, collecting student assignments, evaluating student assignments, and feedback, only 68.75% students attended. The data on the results of guidance: thesis proposal approval, proposal seminar approval sheet, implementation of proposal seminars, the quality of student presentations, evaluation of the results of the proposal seminar, and research implementation, namely 65,63% students. Among the students who have followed the online thesis guidance, two students have arrived at the research results seminar, and 19 students have arrived at the research stage. Based on the results of the research up to the discussion in this research report, it has been found that an effective online thesis guidance pattern is applied to students.

Keywords: *Online guidance, students' thesis, Covid-19_Pandemic, HD Model.*

1. INTRODUCTION

Online learning continues to gain acceptance and is implemented very widely, especially after the outbreak of the Covid-19 pandemic which was followed by calls for physical distancing and work from home in the world in general and in Indonesia in particular. DeSantis (2013) reports the results of Babson's recent study which determined a 9.3% growth in online learning activities from August 2010 to August 2011. This period resulted in the highest rate of participation of all-time online learning participants at 32% of students taking at least one course. by online. According to Russ, Mitchell, and Durham referring to Donnelly and others who support this finding that online education continues to grow which makes an important contribution to providing education for the community (Russ, et all, 2010).

However, online learning presents different challenges in the process including effective guidance patterns compared to face-to-face instruction Baker. The importance of designing online tutoring patterns is to recognize these challenges in order to be effective. The challenges are diverse and consist of various roles that must be handled by lecturers including pedagogical, social, managerial, and technical aspects (Berge, 2008; Baker, 2011). The emergence of new technology, and a dramatic increase in student participation, especially after the existence of various online learning facilities for MOOCs (massive open online courses), including the Google Classroom. An important factor that must be included in the administration of successful online learning is the variety of student learning styles, and whether online lectures can adequately meet student learning needs.

Hawk and Shah (2007) remind educators that every student has a different learning style. This learning style has been identified. Kolb (1984), Gregorc (1987), Felder and Silverman F (19779), Dunn (1990), and Fleming's (2001) Visual, Aural, Reading / Writing, Kinesthetic

(VARK) model provide models of different options for means. learning for students.

Many other educational researchers have noted this diversity of learning styles and preferences including Allitt (2010); Antonancopoulou (2006); Antonancopoulou and Chiva (2007); Binsted (1980); Brockbank, McGill, and Beech (2002); Collin (2007); Easterby-Smith and Lyles (2006); Honey and Mumford (1992); Kaufman et al. (2010); Kolb, Rubin, and MacIntyre (1984); Macpherson, Jones, Zhang, and Wilson (2003); Pashler, McDaniel, Rohrer, and Bjork (2008); Pasupathi (2012); Perry, Samuelson, Malloy, and Schiffer (2010); HE Rau (2009); H. Rau (2012); Schaler (2006); and much more.

From this previous research study, this study will examine the design of online student thesis guidance patterns during the Work From Home and Study From Home Pandemic Covid-19 period and an analysis of the effectiveness of the results of guidance for students using the google classroom virtual classroom.

The purpose of this research is (1) Finding thesis guidance patterns to students online during the WFH Covid-19 pandemic. (2) Analyzing the effectiveness of thesis guidance patterns to students online during the WFH Covid-19 pandemic.

2. METHOD

In this study, students were involved who actively participated in online thesis guidance using the google classroom virtual class platform in the even semester of the 2019/2020 academic year until the odd semester of the 2020/2021 academic year. Activities undertaken include: virtual class planning, pre-mentoring, implementation of guidance, results of mentoring. The online tutoring class was attended by 32 (thirty two) undergraduate students. The implementation of online thesis guidance has been carried out since the commencement of WFH and SFH at Makassar State University (UNM) on 19 March 2020. All forum activities are carried out and archived on the google classroom platform. Each activity (original and post reply) is assessed using a rubric and examples of grading criteria are distributed to each student at the start of the class. Also, each class is provided with information relating to online behaviour and acceptable scientific ethics. Each class includes a non-stratified introductory component consisting of two elements: self-introduction and self-assessment of student activities according to their needs according to their respective thesis plans.

Each student has a documented track record of virtual communication interactions, so that it can be used to analyze the effectiveness of the existing guidance patterns. Activities consist of (1) planning: opening an online tutoring class; inviting students to join by submitting the class access code via the group WhatsApp facility or email group; students claim to join, (2) Pre-mentoring: classroom instruction is given; provide assignment instructions by setting a deadline for submission of assignments. (3) The mentoring process: conducting class discussions; collection of student assignments; evaluation of student assignments; feedback. (4) Results of guidance: thesis proposal approval; proposal seminar approval sheet; implementation of proposal seminars; the quality of student presentations; evaluation of the results of the proposal seminar; research implementation.

Interaction patterns during the implementation of guidance which include self-introduction and student learning styles, and the results of learning styles are used as factors to be analyzed. Regarding the assessment of online discussion posts, two criteria were used: value for quantity of submissions and value for quality of delivery. If students submit the required minimum number of posts, they are guaranteed a letter grade of at least a "B" for a quantity perspective, and if they at least follow Netiquette's policies and sample posting documents, they are guaranteed a "B" grade for quality. Therefore, the rating for posts starts at the letter "B" level to achieve the minimum requirements, and increases with increasing activity level and delivery quality. There are no "late" penalties for this activity.

Each syllabus, as well as a rubric, instructs students that at least one original post, and three reply posts per week are required. Reply posts can be "real" posts from other students or as replies to future replies. Original posts that received at least one reply post were recorded in this study. Next, students are instructed that the original posts must be submitted by midnight Sunday for each class week. Data is captured regarding the actual delivery date of the post compared to the required delivery date, and in this study, this data is identified as a negative "delay" indicating that the post was sent before the due date, while a positive number indicates it was sent after the due date. The data obtained were analyzed using descriptive statistical software.

Thus, from the results of this study, it is hoped that an overview of the pattern of online student thesis guidance and its effectiveness in completing studies amid the limitations of the Covid-19 pandemic can be obtained. The research scheme can be seen in Figure 1.

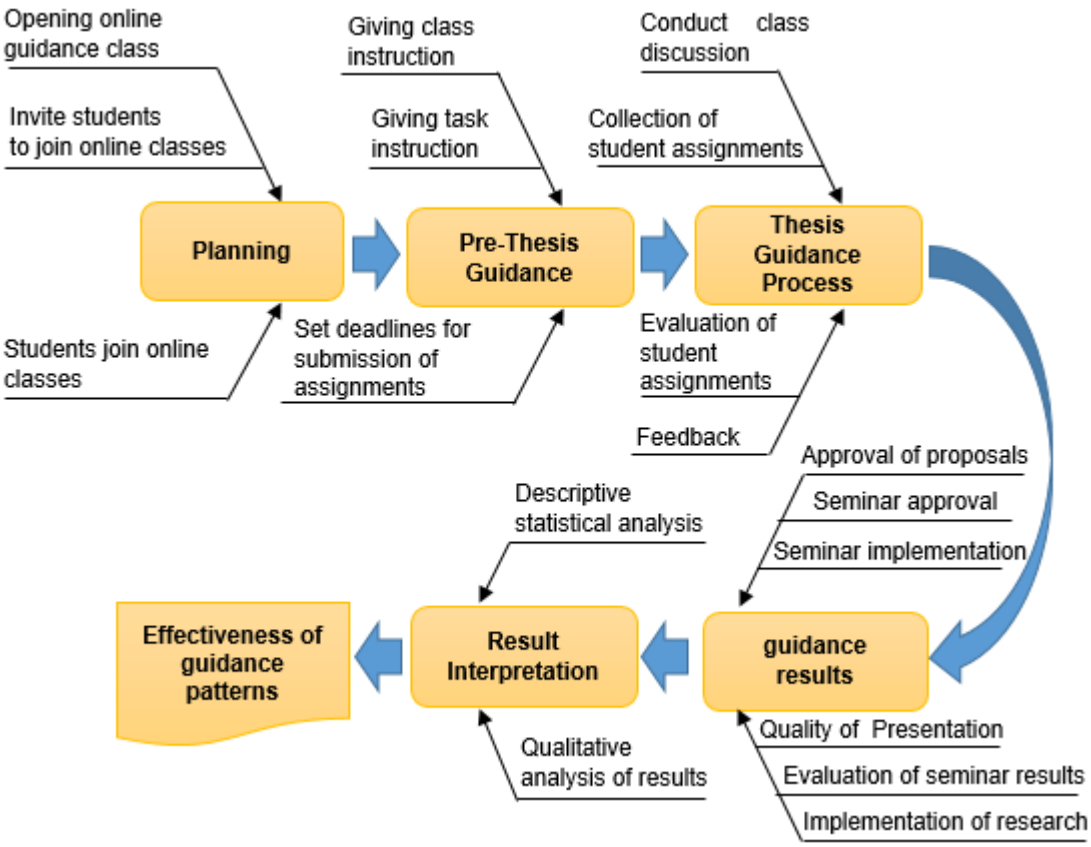

Figure 1 Research flow chart

3. RESULT AND DISCUSSION

Online guidance activities were carried out for 32 (thirty two) students, consisting of 26 female students and 8 male students for thesis guidance. Of the 32 analyzed for this study, there was one student who was only active in thesis guidance via email. Discussions in the form of questions and response responses (original and post replies) occurred very intensively during (1) consultation on proposal content, (2) approval of proposals, (3) approval of proposal examination schedules, (4) preparation of research instruments, (5) post-consultation proposal examination, and (6) research implementation. Female students show higher posting rates (original posts that received first round responses from other students before being responded by tutors).

As has been stated above, that the purpose of this study is to find patterns of online thesis guidance and to know the effectiveness of online thesis guidance, so that every post that "contributes to the effectiveness of online tutoring" is the original post that received at least one reply to other posts. The purpose of identifying these posts is to ensure that the percentage of posts that influence further discussion, and that is to say, help to build a deeper and broader on the online thesis guidance process.

Student activities recorded in the google classroom virtual class are shown in Table 4.1. This activity is described in terms of the percentage of student involvement which consists of all students (100%) following the planning: opening of online tutoring classes; inviting students to join by submitting the class access code via the group WhatsApp facility or group email; students claim to join, and Pre-coaching: classroom instruction is given; provide assignment instructions by setting a deadline for submission of assignments.

Table 1. Student activity during online thesis guidance

Activity	Count of Student	Percentage (%)
Planning	32	100
Pre-thesis guidance	32	100

Thesis guidance Process	22	68.75
Thesis guidance result	21	65.63

As for the mentoring process: conducting class discussions; collection of student assignments; evaluation of student assignments; and feedback, only 68,75% students attended. As for those who have shown guidance results: thesis proposal approval; proposal seminar approval sheet; implementation of proposal seminars; the quality of student presentations; evaluation of the results of the proposal seminar; and research implementation, namely 65,63% of students. Among the students who have followed the online thesis guidance there are 2 students who have arrived at the research results seminar, and 19 students have arrived at the research stage.

Table 2. Communication media of student during online thesis guidance

Communication pattern	Count of student	Percentage (%)
LMS *google classroom*	31	96.88
Email	1	3.12

Table 4.2 shows the data of students who take online thesis guidance, which are differentiated based on their online communication media. Apart from using virtual classroom media and email, the implementation of online thesis guidance is also done by using zoom meetings. The purpose of guidance using the zoom meeting is to provide reinforcement for the communication that has been made through the google classroom and email platforms.

Based on the research data described above, of the 32 (thirty two) students enrolled in the thesis guidance in the academic year 2019/2020 even and 2020/2021 odd. Only 1 (one) person does not register on the LMS google class room but the person concerned is actively consulting online via email. Thus, based on these data, it should be assumed that there is a tendency for differences in the human dynamic model (Human Dynamic model) to students who are the research subjects. The in-depth study of the HD model data will be further investigated in the remaining time of the study by applying the guidance pattern through the zoom meeting. The findings of this study are consistent with the results of research conducted by Hawk and Shah [5].

The choice of individual learning styles of each participant in this thesis guidance is done by each participant of the online thesis guidance after they have read carefully and carefully each component of the five dominant HD learning styles, namely MP, PM, PE, EM and EP. Even so, from a number of participants who took part in this online thesis guidance class, there were still 7 people (21.88%) who had not given a choice of learning styles that matched their personal characteristics. This can be seen in table 3, while the distribution of choices in the five types of HD learning styles can be seen in table 4.

Table 4 shows the five types of HD learning styles described in the google classroom which are then evaluated independently by the online thesis guidance class participants. Each participant reads carefully the description of each learning style, then participants determine the type of learning style for each based on the suitability of that description

Table 3. Determination of HD learning style choices during online thesis guidance

Communication pattern	Count of student	Percentage (%)
Specify self-learning style	25	78,12
Unspecified self-learning style	7	21,88

Table 4. Type of HD learning style choices during online thesis guidance

HD Learning Style	Count of student	Percentage (%)
Mental-Physical (MP)	12	48
Physical-Mental (PM)	2	8
Physical-Emotional (PE)	0	0
Emotional-Mental (EM)	5	20
Emotional-Physical (EP)	6	24
TOTAL	**25**	**100**

The results of observations about this learning style show that of the total participants who identified their learning style, most participants (48%) identified that their learning style was MP, then those who chose EP were 24%, those who chose EM 20%, and those who chose PM 8%, and no one identified his HD learning style in the realm of PE. So it can be said that in this online thesis guidance process, the tendency of the participants, most of the participants, still has a tendency to proceed with a linear learning style.

The characteristics of this learning style as described in Rau (2014) are individuals who have a tendency to have a clear, logical and structured learning style. Learning starts from global things then is described in detail by emphasizing the important points in learning. The meaning of learning and the importance of everything that is learned is clearly described, with an emphasis on things that are visual in nature. Individuals with this learning style are also able to work independently, but afterward it is also possible to work in groups and be able to share and discuss. So that in the end individuals with this learning style are able to complete the tasks given in online thesis guidance with satisfactory qualifications.

The finding of the tendency of the MP type HD learning style in the majority of participants of online

thesis guidance is confirmed by the results of the guidance presented in table 1 which shows that the percentage of online thesis guidance achieved by participants is 68,75%, which means that most students are able to complete the assignments given during the online thesis guidance process. This shows that if the online thesis mentoring process is well prepared/ designed using a well-structured rubric and coaching stages coupled with the right coaching style modelling will provide effective and maximum results.

4. CONCLUSION

Based on the results of the research up to the discussion in this research report, it has been found that an effective online thesis guidance pattern is applied to students. The follow-up of this study is to confirm the HD model for each individual student to be able to recognize the online communication patterns that are most suitable for each student. This confirmation is done by meeting via zoom, so that answers to students' choices can be obtained directly through online media which shows that most participants have an MP learning style which means that they are able to work independently in a structured manner in completing the given assignments.

AUTHORS' CONTRIBUTIONS

The authors contributed to research and paper writing as follows: (1) Samnur: initial research preparation, methods and data analysis, writing reports, and manuscript drafts. (2) E. H. Sujiono: research preparation, literature review and research design, analysis and interpretation of results, reviewing manuscript drafts. The two authors discussed and produced a final version of the manuscript.

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REFERENCES

[1] DeSantis, N. (2013, January 8). Online enrollments grow again, though many colleges are undecided on MOOCs.

[2] Russ, C. L., Mitchell, G. W., & Durham, S. K. (2010). Components that affect success in distance learning as perceived by career and technical educators. Business Education Innovation Journal, 2(2), 73-79.

[3] Baker, D. L. (2011). Improving pedagogy for online discussions.

[4] Berge, Z. L. (2008). Facilitating computer conferencing: Recommendations from the field. Educational Technology, 35(1), 22-30.

[5] Hawk, T. F., & Shah, A. J. (2007). Using learning style instruments to enhance student learning. Decision Sciences Journal of Innovative Education, 5, 1-19.

[6] Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice Hall.

[7] Gregorc, A. F. (1979). Learning/teaching styles: Their nature and effects. NASSP Monograph, (October-November), 19-26.

[8] Felder, R. M., & Silverman, L. K. (1988). Learning and teaching styles in engineering education. Engineering Education, 78, 674-681.

[9] Dunn, R. (1990). Understanding the Dunn and Dunn learning styles model and the need for individual diagnosis and prescription. Journal of Reading, Writing, and Learning Disabilities International, 6, 223-247.

[10] Fleming, N. D. (2001). Teaching and learning styles: VARK strategies. Christchurch, New Zealand: Author.

[11] Allitt, P. N. (2010). The art of teaching: Best practices from a master educator. Chantilly, VA: The Teaching Company.

[12] Antonancopoulou, E. (2006). The relationship between individual and organizational learning: New evidence from managerial learning practices. Management Learning, 37, 455-473.

[13] Antonancopoulou, E., & Chiva, R. (2007). The social complexity of organizational learning. Management Learning, 38, 277- 295.

[14] Binsted, D. S. (1980). Design for learning in management training and development. *Journal of European Industrial Training*, *4*(8), 1-32.

[15] Brockbank, A., McGill, I., & Beech, N. (Eds.). (2002). *Reflective learning in practice*. London, England: Gower Publishing.

[16] Collin, A. (2007). Learning and development. In J. Beardwell & T. Claydon (Eds.), *Human resource management: A contemporary approach* (5th ed., pp. 260-306). Harlow, UK: Pearson.

[17] Easterby-Smith, M., and Lyles, M. A. (Eds.). (2003). The Blackwell handbook of organizational learning and knowledge management. Oxford, UK: Blackwell.

[18] Honey, P., & Mumford, A. (1992). Manual of learning styles (3rd Rev. ed.). London, UK: Peter Honey.

[19] Kaufman, S. B., DeYoun, C. G., Gray, J. R., Jimenez, L., Brown, J., & Mackintosh, N. (2010). Implicit learning as an ability. Cognition, 116, 321-340.

[20] Kolb, D. A., Rubin, I. M., & McIntyre, J. M. (1984). Organizational psychology: An experiential approach. New York, NY: Prentice Hall.

[21] Macpherson, A., Jones, O., Zhang, M., & Wilson, A. (2003). Reconceptualising learning spaces: Developing capabilities in a hi-tech small firm. Journal of Workplace Learning, 15, 259- 270.

[22] Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. Psychological Science in the Public Interest, 9, 106-119.

[23] Pasupathi, M. R. (2012). How we learn. Chantilly, VA: The Teaching Company.

[24] Perry, J. K., Samuelson, L. K., Malloy, L. M., & Schiffer, R. N. (2010). Learn locally, think globally: Exemplar variability supports higher-order generalization and word learning. Psychological Science, 21, 1894-1902.

[25] Rau, H. E. (2009). Online discussion and communities of practice. Business Education Innovation Journal, 1(2), 92-96.

[26] Rau, H. (2012). Student reflective practices. China-USA Business Review, 11, 564-580.

[27] Schaler, J. A. (2006). Howard Gardner under fire: The rebel psychologist faces his critics. Peru, IL: Open Court Publishing. Seagal, S., & Horne, D. (1997). Human dynamics: A new framework for understanding people & realizing the potential in our organizations. Waltham, MA: Pegasus Communications.