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HANDWRITING IN TEACHING WRITING

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ABSTRACT

This study, with 74 purposively assigned participants, evaluated the student's perception of the use of handwriting in the Portfolio-Based Timed-Handwriting Model (PBTHM) implementation to teach composition at the English Education Department of Universitas Muria Kudus (EED of UMK). PBTHM consists of distinctive features, i.e. time limit, assigned topic, no assistance mode, handwriting mode, and fair play mode. All works are revised and compiled into a digital portfolio. The perceptional quantitative method was used to reveal the students' perception of PBTHM implementation. The students' perceptions of handwriting are 4.04 out of 5.00 which means the students have a very positive perception of the use of handwriting. Further studies may address the use of a qualitative approach to investigate the students' voices on the use of handwriting in teaching writing with a wider target population. The use of handwriting on digital gadgets which is now possible must be important to investigate in this MDGs era.

Keywords: Perceptions, Handwriting, Teaching writing

INTRODUCTION

In the era of the Millennium Development Goals (MDGs), the use of handwriting in the teaching-learning process must be interesting to investigate. Using Stake's Countenance Evaluation Model, this paper as a part of a bigger study, with 74 purposively assigned participants, is to evaluate the students' perceptions of the use of handwriting in the Portfolio-Based Timed-Handwriting Model (PBTHM) implementation based on relevant theories, previous qualitative investigations, teaching experiences, and best practice to teach composition at the English Education Department of Universitas Muria Kudus (EED of UMK). PBTHM consists of distinctive features, i.e. time limit, assigned topic, no assistance mode, handwriting mode, and fair play mode. All works are revised and compiled into a digital portfolio.

The Stake's countenance model highlights the antecedents, transactions, and outcomes (Wood, 2001). Some initial investigations by Syafei (2010, 2012, 2014, 2019) and Syafei et al. (2020, 2021a, 2021b) also qualitatively demonstrated positive drives, perceptions, and soft skills of PBTHM implementation from the students' perspectives. However, quantitative measures on the use of handwriting in PBTHM implementation so far are hardly available. The gap is well seen in that previous studies have not addressed the PBTHM concerning ELT writing.

Handwriting

Handwriting is writing by hand (with a pen or pencil) instead of writing on a keyboard (Lund, 2015). In recent days, performing handwriting on a digital gadget is enabled. Writing is an excellent opportunity to reflect on language and language use because writing has a slower pace than speaking and leaves permanent notes (Williams, 2012). Writing is technology-dependent, but the reach of different technologies still needs to be considered a neglected area of research (Mangen & Velay, 2010).

Handwriting is automatic so students can focus on organizing ideas needed in effective composition (Berninger, 2012). According to Silver (2018), handwriting is brain-friendly. Handwriting, not typewriting, supports the recall of letters and visual identification (Mangen, 2018). Handwriters who form letters show significant activity in the brain related to reading and letter recognition (James & Engelhardt, 2012). Bounds (2010) also maintains that some brain regions are activated when writing by hand but not while typing or texting. Text generation transforms ideas into language representations in the working memory (Limpo et al., 2014). Handwriting is still done and used as a tool for ELT learning (Lund, 2015). Students who take notes on laptops performed worse on conceptual questions than students who take notes by hand, whereas taking more notes can be beneficial (Mueller & Oppenheimer, 2014). The authenticity of handwriting differs from that of typed writing in three aspects: singularity, individuality, and materiality (Neef, 2006).

The benefits of handwriting are also related to the goals of the higher education curriculum, especially the so-called human literacy, which the Ministry of Education of the Republic of Indonesia is currently promoting. Handwriting is also essential for early adoption into letter processing in brain regions involved in successful reading (James & Engelhardt, 2012). Writing achievement is also used to evaluate the impact of the course of study, teachers, teaching methods, and other factors considered necessary in educational practice (Hosseini et al., 2013).

Meanwhile, handwriting-related activities during this century have yet to be recorded (Sassoon, 2005). Several studies address the potential of handwriting directly in English language education. Handwriting can play an important role when used as a tool for learning in ELT (Lund, 2015). Through a focus group discussion, she found that nineteen Norwegian EFL teacher-training students preferred to write by hand. Handwriting provides a sufficient reflection on language and language use (Williams, 2012; Lund, 2015). By taking notes by hand and on laptops, university students who took notes by hand learned better in both laboratory and real-world classroom settings (Mueller & Oppenheimer, 2014 in Lund, 2015). Another study shows that students can remember unknown letters and characters more intensely and longer when they memorize by handwriting rather than typing (Mangen & Velay, 2010 in Lund, 2015). A comparison of one group using their laptops to browse, search and socialize was tested immediately, while another group closed their laptops. The latter group performed significantly better in the test on the material covered (Hembrooke & Gay, 2003 in Lund, 2015)

Regarding the use of laptops in the classroom, research shows that students spend 42% of their lecture time multitasking or doing activities beyond the course content (Kraushaar & Novak, 2010). There is no indication that typing training is better than handwriting training for any task. On the other hand, handwriting training was better than typing training in writing (Kiefer *et al*., 2015).

More studies on handwriting tend to be technically related to handwriting recognition, showing promising progress (Cheriet *et al*., 2009). This handwriting input system is investigated

independently of the handwriting pad or the pen (Wang et al., 2011). In handwriting behaviors of true and false writing, differences were found in the mean of spatial measures (mean stroke length and mean stroke height). However, no differences were found in temporal measures and the number of peak velocities (Luria & Rosenblum, 2010). The handwriting role in ELT needs to be further investigated.

Perception

Perception means students' opinions of the implementation of PBTHM. Investigating students' perceptions is beneficial to obtain insightful information about any new implementation in English teaching and learning (Thi & Nhi, 2018). L2 students are required to perform well in college-level classes. This suggests that timed-writing exams may be a better tool for assessing academic writing (David, 2015). The general principle is that the way people perceive something positively or negatively affects their behavior toward it. Moreover, language learners prefer dialogue-based learning of culture over other learning methods such as reading (Rostami, 2016). Academic activities that are most often used by teachers are not necessarily considered the most beneficial activities for students (Cilliers, 2012). Voice and new literacies are also investigated in students' perceptions of writing instruction in a secondary English classroom (Martin, 2020). Students also have a positive perception of using portfolios (Thi & Nhi, 2018).

The practice of portfolio-based timed handwriting contributes to students' confidence and awareness of their writing capabilities through their original and authentic compositions, feedback, and revisions (Mueller& Oppenheimer, 2014). Perception in this context refers to students' opinions, views, and agreement/disagreement on the use of PBTHM in learning writing. Perceptions refer to students' opinions on the use of PBTHM in writing class based on SWOT perspectives (strength, weakness, opportunities, and threat) of handwriting practice in the teaching and learning process. The handwriting role in EFL writing needs to be explored.

Method

This study was conducted in composition classes that administered PBTHM as a best practice since 2015 in writing classes, especially in *Paragraph Writing* courses in 2015, 2016, 2017, 2018, and 2020, and *Essay Writing* courses in 2017,
2018, 2019, 2021, and 2022 at the English Education Department. Yin (2011) states that in research, the sample could be probably picked in an intentional way known as purposive sampling. The population of this research was all of the students of EED of UMK who completed the writing classes undergoing PBTHM implementation and they provided their informed consent to participate in this study. Purposive sampling was used because there was no favorite class in this department under the assumption that students' abilities in the available classes were equal and all of them met the criteria of completing PBTHM implementation. Consequently, the sample of this examination comprised 74 students who finished the Paragraph Writing course which utilized the PBTHM in the academic year of 2019/2020.

Using a perceptional quantitative method, this study only addresses the student's perception of the use of handwriting during the PBTHM implementation. This study is hoping to contribute better empirical insight related to the student's writing quality and soft skills. A quantitative method was used to collect and analyze quantitative data and accordingly to understand a research problem (Creswell, 2014). The perceptional quantitative method was to focus on students' perception of the use of handwriting in PBTHM implementation. In this PBTHM Implementation evaluation, the intents category consists of three stages: (1) The

Antecedents: the relevance of PBTHM implementation. This study maintains that the relevance of PBTHM implementation is associated with aims/objectives, syllabus, lesson plan, materials, procedure, media, and evaluation of learning in the paragraph writing class. (2) The Transaction/Process: The quality of in PBTHM implementation process is associated with the procedure/steps: Planning the PBTHM, Preparation for students for PBTHM, Collecting Evidence (works) for the PBTHM, Monitoring the progress of PBTHM, making an effort for the improvement of writing performance, doing reflection during PBTHM, and Displaying the works/putting writing processes in the students; portfolio. And (3) the outcome: effectiveness and students' perception.

The data collection was administered by using an instrument in the form of a questionnaire examining the students' perceptions (opinions, views, and agreement with PBTHM). In this paper, the investigation is limited to the use of handwriting during the implementation of PBTHM. A perceptional questionnaire in this investigation is used to gather quantitative data on the students' Perceptions of the use of handwriting related to the Implementation of the Portfolio-Based Timed- Handwriting Model (PBTHM) at the English Education Department of Universitas Muria Kudus related to the use of handwriting only. The instrument is also supported and triangulated by documentary studies to elicit data on PBTHM implementation by observing the documents related to it. The most critical documents are students' digital portfolios submitted as final projects in writing class as the data source. The items are presented in a 5-point Likert Scale of closed- ended questions, ranging from (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. The data analysis addressed the questionnaire result by using Likert's Summated Rating (LSR) ranging from 1 to 5. The levels of perception are interpreted into the following categories of perception.

Very Negative : 0.00 to 0.99
Negative : 1.00 to 1.99
Neutral : 2.00 to 2.99
Positive : 3.00 to 3.99
Very Positive : 4.00 to 5.00

The questionnaire was reviewed by panel members. They reviewed and commented on the instrument questions for clarity, administration, and consistency. The consensus was determined by the 3-panel members. Triangulation for the qualitative data was administered by comparing and integrating data collected through qualitative methods with data collected through quantitative methods. To test the consistency of the data obtained qualitatively from observations and interviews, some questionnaires were developed and selected based on the research questions (Creswell, 2012). The students' Perception of the Implementation of the PBTHM questionnaire, including the perception of the use of handwriting, belongs to a good validity score of 3.587. The total average validation score is 3.77 (out of 4.0). It shows that the instruments for this study belong to a very good category and are valid.

FINDINGS AND DISCUSSION

The result of the data analysis showed that the students' perceptions of PBTHM are positive on handwriting (4.04) of (5.0). In making the table more understandable, the researcher uses codes one until 5, the agreement with the student's perception. Code 1 is for strongly disagree, code 2 for disagree, code 3 is for neutral, code 4 is for agree, and code is for strongly agree. The details of students' perceptions of handwriting can be referred to in the following table.

Table 1. Perception of the Use of Handwriting in PBTHM Implementation

Table 1. Perception of the Use of Handwriting in PBTHM Implementation

Subject	Perception of the Use of Handwriting in PBTHM Implementation												∑
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
1	4	4	3	2	4	3	4	5	4	5	4	4	3,83
2	4	5	4	5	4	3	4	5	5	5	5	5	4,50
3	3	3	3	3	3	3	3	3	3	3	3	4	3,08
4	3	4	5	5	5	4	3	4	4	5	4	5	4,25
5	2	5	2	4	5	3	5	4	5	5	5	5	4,17
6	2	5	3	5	5	3	5	5	5	5	5	5	4,42
7	4	4	4	4	4	4	4	3	5	4	4	3	3,92
8	4	3	5	2	3	2	4	3	3	5	3	3	3,33
9	2	4	3	4	5	4	3	5	5	5	4	5	4,08
10	2	4	3	4	4	3	5	5	5	5	5	4	4,08
11	5	3	3	4	5	4	4	5	5	3	4	4	4,08
12	4	3	4	5	5	4	4	5	4	5	4	4	4,25

13	4	3	5	2	3	2	4	3	3	5	3	3	3,33
14	3	3	4	3	3	3	4	4	3	5	3	3	3,42
15	4	4	4	5	5	4	4	4	5	5	5	5	4,50
16	4	3	5	3	4	2	3	4	5	5	4	4	3,83
17	4	3	5	5	4	3	4	4	5	4	3	4	4,00
18	4	3	5	2	3	2	4	3	3	5	3	3	3,33
19	4	5	3	5	5	4	5	5	5	5	4	5	4,58
20	3	5	3	5	5	3	5	4	5	5	5	5	4,42
21	5	5	5	4	4	5	5	5	5	5	4	4	4,67
22	4	3	5	4	3	3	4	4	4	4	4	5	3,92
23	4	5	3	5	3	4	4	5	5	5	3	4	4,17
24	4	3	3	4	4	3	3	4	4	4	4	5	3,75
25	5	3	3	4	5	4	5	5	4	5	5	5	4,42
26	2	3	4	4	4	3	4	4	2	5	5	5	3,75
27	5	5	5	5	4	4	4	3	4	5	4	5	4,42
28	2	5	3	5	3	3	4	4	5	5	4	5	4,00
29	2	5	3	5	5	3	5	5	5	5	5	5	4,42
30	5	4	4	5	4	3	4	5	5	4	4	4	4,25
31	4	3	5	3	3	5	5	5	5	5	4	4	4,25
32	4	5	5	4	5	3	4	5	5	4	4	4	4,33
33	4	4	4	4	4	4	4	4	4	4	2	3	3,75
34	4	5	3	2	3	2	4	5	4	4	3	5	3,67
35	5	5	5	5	5	4	5	5	5	5	5	5	4,92
36	4	2	5	3	4	1	2	3	5	5	2	4	3,33
37	3	5	5	5	5	5	5	5	4	4	4	3	4,42

38	3	2	4	4	2	4	5	3	5	4	3	5	3,67
39	4	4	3	3	4	3	4	3	4	4	4	4	3,67
40	5	4	4	4	5	4	5	4	4	5	4	4	4,33
41	3	4	4	4	4	3	4	5	5	5	5	4	4,17
42	3	1	4	4	4	3	3	4	4	4	3	3	3,33
43	5	5	4	5	4	4	5	2	4	4	4	2	4,00
44	5	5	5	4	4	4	5	5	5	5	5	5	4,75
45	5	4	4	3	5	3	5	4	4	4	5	4	4,17
46	4	3	5	3	5	4	3	3	3	5	4	5	3,92
47	5	5	5	5	5	5	5	5	5	5	5	5	5,00
48	4	5	5	5	5	5	5	5	5	5	5	5	4,92
49	3	2	3	2	3	3	3	4	4	3	4	4	3,17
50	3	1	4	3	3	3	4	5	4	5	4	3	3,50
51	3	1	4	3	3	3	3	4	4	5	3	4	3,33
52	4	3	5	2	3	3	5	3	3	5	3	3	3,50
53	4	5	5	5	5	5	5	5	5	5	5	5	4,92
54	4	4	2	5	2	2	5	5	5	5	5	4	4,00
55	4	5	4	3	4	4	5	5	5	5	3	5	4,33
56	4	5	5	3	4	1	5	3	5	5	5	5	4,17
57	4	4	4	4	4	4	4	4	4	4	4	4	4,00
58	3	4	5	5	5	3	4	4	5	5	3	5	4,25
59	2	4	3	3	4	4	3	2	3	4	4	3	3,25
60	5	5	5	4	5	4	5	5	5	5	5	5	4,83
61	5	5	5	5	5	4	5	5	5	5	5	5	4,92
62	4	3	4	4	4	3	4	5	5	5	4	5	4,17

63	4	4	5	5	5	3	4	5	5	5	4	4	4,42
64	5	5	5	5	4	4	5	5	4	5	5	5	4,75
65	3	1	3	4	3	4	4	5	5	4	4	4	3,67
66	4	3	5	2	3	2	4	3	3	5	3	3	3,33
67	3	3	3	2	2	2	4	4	2	3	5	2	2,92
68	4	2	3	5	4	2	5	5	5	5	3	4	3,92
69	4	5	4	4	3	3	4	4	4	4	4	4	3,92
70	5	5	5	5	5	4	5	5	5	5	5	5	4,92
71	3	3	4	4	3	3	5	4	4	4	2	5	3,67
72	4	4	3	3	4	2	2	4	3	3	2	4	3,17
Average	3,78	3,81	4,04	3,92	4,01	3,32	4,21	4,24	4,33	4,60	3,99	4,22	**4,04**

Table 2. Handwriting Perceptional Aspects of the Questionaire

	Perceptional Aspects of Handwriting	Levels of Perceptio n
1	Using handwriting is practical, cheap, money-saving, time-saving, and energy-saving.	3,81
2	The instant and direct result can be obtained from handwriting. To enjoy the work, I do not have to wait for my work to be printed.	4,04
3	Handwriting is flexible. I can do my assignments in any place and time you want. I do not depend on gadgets or electricity.	3,92
4	Handwriting is unique. My handwriting represents myself.	4,01
5	It is a good way to write a composition (a paragraph) using handwriting, although it is a traditional one.	3,75
7	Handwriting is human. Handwriting can make me feel relaxed and calm.	3,32
8	Handwriting minimizes copy-paste from the internet or other work. Handwriting is hard to be copied.	4,24
9	Handwriting enables me to memorize lessons better and easier to retrieve them. I will better memorize what I have written in handwriting.	4,33
10	Handwriting is positive and it can improve my writing skills.	4,60
11	Handwriting assignments mode can be used for academic works and	3,99
12	Handwriting can develop my ideas. The idea can appear spontaneously when I write through handwriting.	4,22

	Average	4,04

Table 3. A Summary of Perceptional Categories

Categories of Perceptions	Number of responses	Percentage
1: Strongly Disagree	6	0.69%
2 Disagree	48	5.56%
3: Neutral	183	21.18%
4: Agree	297	34.38%
5: Strongly Agree	330	38.19%
Total	864	100.00%

The perception of the use of handwriting got 4.04 points. It means the students gave a positive perception because handwriting is considered fun since most tasks are done through laptops or gadgets. With handwriting, they can return to the atmosphere of doing traditional tasks. In addition, handwriting is considered more efficient, cheaper, and saves time

The findings strongly supported the previous findings in that students taking paragraph writing classes at EED UMK were still fond of completing assignments by handwriting (Syafei, 2010). The finding of this study was paper-based oriented. The coming studies may address the use of gadgets as students using laptops were off task during lectures (Kraushaar & Novak, 2010). Different technologies of handwriting and writing as learning tools in ELT should be investigated more (Lund, 2015).

The positive perceptions are in line with Berninger (2012), Berninger and Bound (2010), and Berninger and Schwarz who maintain that handwriting is a way to strengthen the mind, train the brain, and possibly perform better than keyboarding. Luria & Rosenblum (2010) agrees with the use of handwriting and keyboarding behaviors.

Bounds (2010) is also relevant to the findings in that in the digital age handwriting is still acceptable and positively perceived. Similar points of handwriting were also provided by Neef (2006) and Sassoon (2005).

Silver (2010) also supports handwriting benefits which are relevant to the findings. In ELT contexts, the findings support Lund (2015) that claims handwriting is a tool for learning.

Surprisingly the subjects who are accustomed to using laptops and gadgets in their daily life positively perceive the use of handwriting modes for academic works and assignments. Most

of them express their positive perception of handwriting for their projects. Most of them recommend this mode be retained in future classes of academic Writing classes (Syafei, 2010).

The theoretical reviews show that using PBTHM is relevant to improving the students' writing ability, fluency, and perception. Students' perceptions of the PBTHM implementation in writing class, especially handwriting were positive (Syafei, 2010, 2014,2019).

Note-taking as an academic skill is required to continue academic learning. Taking notes during lectures is challenging for foreign speakers to learn a foreign language. Students show the most significant progress in writing keywords, separating and recognizing key ideas, and using symbols and abbreviations (Ipek, 2018). Harmer (2007) argues that when communication occurs digitally, in emails, or using word processing software, worrying about handwriting is considered strange. Mueller and Oppenheimer (2014) maintain that note-taking can be categorized in two ways: generative and non-generative. Generative note-taking pertains to "summarizing, paraphrasing, concept mapping," while non-generative note-taking involves copying something verbatim. Students who take handwritten notes still perform better (Mueller & Oppenheimer, 2014). Harmer (2007) argues that when a lot of communication occurs digitally, in emails, or by using word processing software, worrying about handwriting is considered strange. Mueller & Oppenheimer (2014) claims students who take handwritten notes still performed better Syafei (2010) found out that handwriting assignments are acceptable for students. Lund (2015) maintained that handwriting is an important tool for learning in English language education. She informed all the students who preferred to write by hand.

CONCLUSION

The result of the data in percentage can be seen as 0.46% of students choose strongly disagree, 4.86% of students disagree, 19.33% of students are neutral, 42.36% choose to agree, and 32.99% of students strongly agree with the questions in the questionnaire. The highest code is chosen by the students as participants are code (4), as 366 or 42.36% of students chose to agree with the questions in the questionnaire. It means that most of the students have a good perception of handwriting. The perception about handwriting got 4.04 which belongs to very good perception. The students gave a very positive perception because handwriting is fun since most tasks are done through laptops or gadgets. With handwriting, they can return to the atmosphere of doing traditional tasks. In addition, handwriting is considered more efficient, cheaper, and saves time. The second perception about timed writing got 4.08. Students presume that timed writing can boost their writing skills, although it sometimes causes nervousness and anxiety. The perceptional findings showed a positive evaluation of the use of handwriting from the student's perspective and accordingly, the researchers recommend that handwriting can be implemented in Writing classes.

Further studies may address the use of a qualitative approach to investigate the students'

voices on the use of handwriting with a wider target population. The use of handwriting on digital gadgets which is now possible must be important to investigate in this MDGs era.

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