Analysing Student's Perception Workload in Online Typographic Learning

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ABSTRACT
In response to the MBKM curriculum program launched by the government in 2021, several courses need to be reallocated. In the Visual Communication Department at a private university, Typography was one of the mandatory courses affected by the new curricula. This course needs to be reduced from six to three credits with embedded material to support the new curricula. Nevertheless, due to the COVID-19 pandemic, the online teaching method is still implemented, thus arguably increasing student stressors. This research aims to determine the students' perception of academic workload related to the learning outcomes of the typography course. This research employed a quantitative method by collecting data using the NASA-TLX inventory instrument on six typography course assignments by 32 students who completed this course, then analyzed using the appropriate inferential statistical method. The results found that in the process, this course reached the learning outcome while students perceived a medium range of workload. Gender and GPA did not affect perceptions of workload. Controlling student workloads according to appropriate meeting hours with time-disciplined assistance becomes the suggested learning model. The non-optimal use of communication media and design software in distance learning also affected the perception of workload.

Keywords: *MBKM Curriculum, NASA-TLX, Perception workload*, *Stress, Typography*

1. INTRODUCTIONS

Along with advances and developments in technology and media, online learning (e-learning) at the higher education level has been carried out in several countries before the COVID-19 pandemic. E-learning is online learning through network technology with great potential to develop the education system. The researcher conducted a study on 355 respondents and stated that in terms of learning outcome, as measured by grades and test results, there was no significant difference between conventional learning methods and e-learning. E-learning consists of two basic types: (1) asynchronous and (2) synchronous. There are advantages and disadvantages of each type. The flexibility of asynchronous e-learning has potential in this method in which, with the existence of communication media such as email, LMS (Learning Management System) will support working relationships between students and teachers, even when students cannot be online simultaneously. Asynchronous communication also enhances an individual's ability to process information. The recipient has more time to understand the message because an immediate response is not expected. For those who complete their e-learning with other commitments such as family and work, asynchronous e-learning allows students to enter the e-learning environment at any time, download documents and send messages to teachers or friends. Synchronous e-learning, which is generally supported by media such as video conferencing and chat, has the potential to support e-learners in the development of learning communities. Students and teachers experience synchronous e-learning as more social and avoid frustration by asking and answering questions in real time. Synchronous sessions help e-learning learners feel like real participants. Synchronous communication increases motivation, the use of digital media can already be like natural media, such as the ability to convey and observe facial expressions and body language [1]

For complex group assignments, communication is 18 times smoother than via email. Even in this case, proficient typists can usually type at half the speed of speech. The research conducted by Kock [2] showed that fluency in complex collaborative assignments carried out face-to-face was ten times higher than through email. Exchange of 600 words takes about six minutes for a complex group assignment in a face-to-face setting, while an exchange of the same number of words via email will take about an hour.

According to Act of the Republic of Indonesia number 12/ 2012 on Higher Education, in article 35, stated that, the higher education curriculum is a set of plans and regulations regarding the objectives, content, and teaching materials as well as the methods used as guidelines for the implementation of learning activities to achieve the goals of higher education ("Republic of Indonesia's Act on Higher Education (Undang-undang Republik Indonesia tentang Pendidikan Tinggi 2012). This goal is closely related to learning outcomes, namely in the form of internalization and accumulation of science, knowledge, practical knowledge, skills, affection, and competencies that are achieved through a structured educational process that includes a particular field of knowledge/skills or through work experience. Learning outcomes are related to the students' competence in form of the accumulation of individual abilities in carrying out a measurable job description through a structured assessment, covering aspects of independence and responsibility in their field of work. Students' competencies are connected to the curriculum, which needs to be continuously developed based on the needs and developments of the times and technology. The science of Visual Communication Design at the undergraduate level is a higher education that emphasizes the application of knowledge while preparing students to be competent in their fields. Students in the field of design must practice a lot, related to the academic workload in the form of assignments given per semester that need to be completed by students.

Students are often considered individuals who are stressed because they bear a lot of academic workloads. Stress is an emotional feeling that makes a person feel uncomfortable and unhappy with the situation that must be faced [3]. Academic-related stressors refer to any academic activity, such as exams, curriculum, lifestyle, achievement systems [4]. workload, and time management [5]. The term workload can be defined as the amount of work carried out by individuals at a certain time. In this case assignments, tutorials, lectures, tests, quizzes, reports, and practicums that students need to do and complete to graduate [6]

This research seeks to analyze the students' workload in one of the prerequisite courses in visual communication design, namely the typography course. Under the "Merdeka Belajar, Kampus Merdeka" (MBKM, the Independent Learning, Independent Campus) curriculum, some course credits need to revise, add, or subtract. Typography course was one of them. Initially, this course is the compulsory in the third semester and has been the prerequisite to take a studio course in the fifth semester due to its importance of the usage as one out of four design elements that are always present and used in designing visual communication design works.

Previously, before the 2020-2021 academic year, in the odd semester, typography courses were divided into two semesters: Basic and Applied Typography, with three credits each. Basic Typography is dominated by manual assignment, as much as 90%, with the aim of training hand sensitivity on the structure and design of fonts. Applied Typography is carried out digitally. Both courses are intended for students in the third and fourth semesters. Meanwhile, in the odd semester of the 2020-2021 academic year, typography courses are shortened to be a course with three credits through a manual process for initial sketches, followed by a digital process like Applied Typography and added some new material, namely Logo design, with online learning methods. Moreover, previous research revealed that the typography course is one of the subjects that needs to be considered in terms of the material and the delivery process because it is considered that the competency objectives have not been achieved when students take their final project [7]

Due to technological advances and changing social conditions, before the COVID-19 pandemic, online learning has been known in the world of education in recent years, because it is considered an important way of delivering learning in higher education [8] More than 69% of higher education institutions express that online learning is an essential aspect of their long-term strategy [9]. During the last two years, due to pandemic, ready or not, formal education has been carried out online with information and communication that is not bound by space and time, giving rise to various types of learning interactions [10]. Students can also obtain great potential for valuable learning experiences in a virtual environment through the support of the growing technology infrastructure and quality teacher interactions in higher education [11]. However, the drastic change arguably changes the level of motivation and satisfaction [12] as well as the privacy risk [13] of students as the main actor in this activity system. Nevertheless, extraordinary efforts were presumably made by student, teachers, and parents to support the teaching-learning activities, as the life must go on.

In addition, a character is also believed to be a power that can support a person in forming the competence of professional designers in online education, both the lecturer and the student characters. In learning higher education in the fine arts and design, the mentoring process from supporting lecturers is still needed for every work

done by students. Thus, even though education is carried out online, it is still necessary to maintain that the work produced has originality and high-quality [14].

The shortening and addition of material in typography courses coupled with distance learning can cause stress levels for students. Therefore, related to learning outcome, the workload in accordance with the learning experience felt by students during this compacted typography course needs to be analyzed more deeply.

2. METHODS

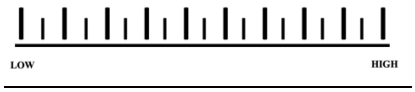
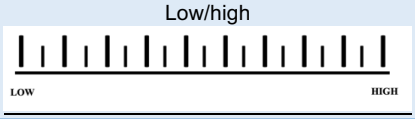
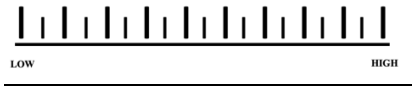
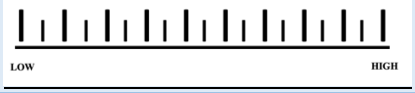
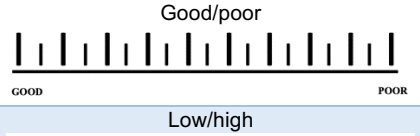
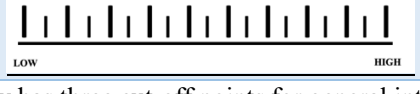
This research quantitatively measured the workload of students who completed an online typography course at one of the private universities in Bandung. The length of the measurement was carried out for one semester, with a check of sampling points for each collection of assignments and exams. There are four assignments and two exams given in this course, namely: 1) Collage Digital Poster of the History of Typography, 2) Characters, 3) Logo Design, 4) Eight Typographic Alignments in Poster Design, 5) Midterm test in the form of a sketch of a set of fonts, and 6) Final test in the form of a final design of a set of fonts. Henceforth, each checkpoint is referred to as an assignment term.

The measurements were carried out on the population of the typography class consisting of 32 respondents who were still present until the end of the course. The maximum number of students allocated in one class contains 15 people because this course involves a lot of work practice in learning. Most students take this course according to the curriculum package, which is taken in the third semester of eight semesters of education for the visual communication design undergraduate program. The requirement for students to take this course is that they have taken two semesters. Most students had only experienced higher education through online media, because since March 2020, in Indonesia and Bandung in particular, the method of providing distance learning has been implemented through the Regulation of the Mayor of Bandung Number 14 of 2020 regarding the implementation of large-scale social restrictions in handling COVID-19, and until the time of data collection, the learning process is still being done online.

2.1. Measurement Instrument

NASA-TLX (Task Load Index) is an inventory instrument used to measure the perception of the mental workload of several different courses and levels of lectures. This instrument was developed by Hart and Straveland [15], as a multi-dimensional measurement scale adapted from the Paper and Pencil Package v.1.0 version into an online questionnaire to be adapted to the conditions of learning carried out online due to the restrictions on the COVID-19 pandemic in Indonesia.

Table 1. Stress Measurement Variables of NASA-TLX

RATING SCALE DEFINITIONS		
Title	Endpoints	Descriptions
Mental Demand	Low/high 	How much mental and perceptual activity was required (e.g., thinking, deciding, calculating, remembering, looking, searching, etc.) Was the task easy or demanding, simple or complex, exacting or forgiving?
Physical demand	Low/high 	How much physical activity was war required was the task easy or demanding, slow, or brisk, slack, or strenuous, restful, or laborious
Temporal demand	Low/high 	How much time pressure did you feel due to the rate or pace at which the task or task element occurred? Was the pace slow and leisurely or rapid and frantic?
Effort	Low/high 	How hard did you have to work (mentally and physically) to accomplish your level of performance?
Performance	Good/poor 	How successfully do you think you were in accomplishing the goals of the task set by the experimenter (or yourself)? How satisfied were you with your performance in accomplishing these goals?
Frustrations level	Low/high 	How insecure, discouraged, irritated, stressed, and annoyed versus secure, gratified, content, relaxed and complacent did you feel during the task?

* This inventory briefly has three cut-off points for general interpretation, namely: >70; 50-70, and <50

The use of the NASA-TLX instrument is quite broad and has a flexible range of applications because it can also be applied to the productive age of the elderly [16]. The six factors measured in this instrument are (1) Mental Demand, (2) Physical Demand, (3) Temporal Demand, (4) Performance, (5) Effort, and (6) Frustration Level. The process of using this inventory begins by making a pair-wise comparison of the factors measuring the mental workload concept, grading the factors in question, and assigning a rating on a scale of 1-100 for each factor being measured. Furthermore, the grade points of each factor selected by the participants were then multiplied by the factor rating and then divided by the number 15 to obtain the total mental workload per participant. This inventory briefly has three cuts of points for general interpretation, namely: >70; 50-69.9; and <50 respectively for the interpretation of high, medium, and light mental workload. Thus, this instrument does not state the factors that need to be improved but will help researchers to understand the mental workload phenomenon experienced by participants and provide a basis for consideration regarding learning methods, the grade points of assignments, the material provided, and other relevant matters.

In the practice of this research, because the reliability and validity test of the NASA-TLX instrument was carried out through an English-language instrument, the back-translated process was carried out on the inventory of the Paper and Pencil Package v.1.0. In **Table 1**, the questionnaire given to the student participants is attached. In addition to the NASA-TLX instrument, GPA, gender, expectations, and goals for attending lectures, and perceptions about the quality of the internet network of students and lecturers who teach were also asked to provide an overall picture.

Before filling out the questionnaire, all participants were given an understanding of the factors to be measured, and the purpose of the measurements carried out and gave them the freedom to fill out the questionnaire voluntarily without affecting the final grade of the typography course. To anticipate misunderstandings when filling out the questionnaire, the lecturer specifically explains the purpose of each factor to be measured, and several examples of cases or their implementation.

2.2. Courses Learning Outcomes: Typography Course

The typography course and the details of the assignments were carried out in 16 meetings. Typography in this semester is a selection of assignments given in Basic Typography and Applied Typography, which were previously taken in two semesters and added logo design material due to requests from advanced courses for this. This course studies the history of the development of typography from prehistoric times to the latest digital era. Students learn the anatomy of fonts, characters, font connotations, and their application to the Logo. Students are also trained to adjust the sensitivity of spatial organization to its placement in the font design process. Students also learn design elements related to typographic syntax, alignment, layout, and its application to print media. Courses Learning Outcomes (CPMK, *Capaian Pembelajaran Mata Kuliah*) of Typography are as follows: (1) Being able to create conceptual solutions and present them visually in the form of visual communication designs, using related technologies; (2) Mastering the theory and principles of design and applying design solutions in media of visual communication design with good and correct stages; (3) Being able to make decisions based on the exploration of ideas and choose various alternative visual communication design solutions independently and in groups. (4) Being able to present the concept of the design result as proof of a sense of responsibility towards the visual communication design profession, either independently or in groups.

In addition, there are also assignments while students are taking this course, which is as follows:

2.2.1. Assignment 1: Collage Digital Poster of the History of Typography

One-time face to face meeting (@ 150 minutes). Sub Course Learning Outcome: After attending lectures from the lecturer, students understand (C2) the history of typography development from prehistoric times to the latest digital era and choose only one topic to summarize into a digital collage poster. Work steps: (1) Students choose one topic about the history of typography from the material that has been explained; (2) Students lay out the material into a digital collage poster.

2.2.2. Assignment 2: Type Characters

Three times face to face meetings (@ 150 minutes). Sub Course Learning Outcome: After attending a lecture on the character theory of texture, color, and font expression in typography from the lectures, students understand (C2) and can distinguish four types of fonts, shapes & characters and apply (C3) the four characters of the fonts in four appropriate connotative word designs. Work steps: (1) After listening to the theoretical explanation from the lecturer, each student search for 40 brand logos categorized into four types of fonts, shapes & characters; (2) Students make designs of 40 sketches by choosing the available fonts, not designing fonts. Each character of the font consists of ten sketches; (3) Lecturer selects four sketches from 40 designed sketches; (4) Students digitize the sketch and add details such as color, texture, or font layout to show the character of the fonts; (5) Students provide final assistance to the lecturer, if

there is no improvement needed, the work is formatted in a predetermined presentation size.

2.2.3. Assignment 3: Logo Design

Five times face to face meetings (@ 150 minutes)**.** Sub Course Learning Outcome: After listening to the explanation about the logo and how to make a mind map to design a logo from the lecturer, students can create (C6) an attractive and communicative logo design and implementing those design to the Standard Guide Manual in A4 size. Work steps: (1) After listening to the theoretical explanation from the lecturer, each student makes a mind map to design the logo and then concluded it into a concept to design a logo; (2) Students make 20 logo sketches according to the concept that has been discussed with the lecturer; (3) Lecturer selects three alternative designs to digitize; (5) Lecturer selects one final logo design; (6) Students carry out assistance with lecturers until the finalization of the logo design; (7) Students design a Standard Guide Manual of A4 size logo.

2.2.4. Assignment 4: Eight Typographic Alignments in Poster Design

Five times face to face meetings (@ 150 minutes). Sub Course Learning Outcome: After listening to the explanation of the theory of eight typographic alignments and its application from the lecturer, students can understand (C2) eight typographic alignments and create (C6) serial poster design by applying (C3) the given theory. Work steps: (1) After listening to the theoretical explanation from the lecturer, each student makes an analysis on the representation of eight typographic alignments in the digital poster using the theory explained. The analysis results were collected as a preliminary study; (2) Students make 10 hand sketches using a minimum combination of four alignments in A6 size and portrait format; (3) Lecturer selects several designs, then the students digitize the selected sketch; (4) Students carry out assistance with lecturers until the finalization of the logo design; (5) Students collect poster designs in A3 format and have been given information about their alignments.

2.2.5. Assignment 5: Eight Typographic Alignments in Poster Design

Two times face to face meetings. Sub Course Learning Outcome: After listening to an explanation about vernacular typography and font anatomy from the lecturer, students understand (C2) the anatomy of the letters A-Z correctly and space sensitivity as the basis for designing fonts. Students can create (C6) design modifications of the letters A-Z, and 0-9 in digital form. Work steps: (1) Brainstorming between lecturer and student to find cultural-themed ideas that can be modified with fonts so that they become new font designs; (2) Students make a sketch of a set of fonts according to the concept that has been discussed with the lecturer; (3) The fixed sketch is traced in digital form, then assisted by the lecturer; (4) If there is no improvement, the student will finalize the design set from the letters A-Z, 0-9 in digital form; (5) Students make poster layouts from font designs that have been designed and give names to the fonts. The design of a set of letters A-Z and 0-9 is presented in A3 size format. This assignment is divided into two assignments and is used as the scores for the midterm and final tests. Consideration continues to include this material because it sees the need for students to have experience in making a modified font design that can produce new font designs with the characteristics of each student.

3. RESULT & DISCUSSION

This research involved 32 students as the participants, consisting of 27 female students and five male students. The age of the students ranged from 19 to 22 years, while the GPA range in the previous semester was 2.29 to 2.95 (M = 3.56; SD= .42). All participants were considered valid if they filled out all the NASA-TLX questionnaires given (six times, for four assignments and two exams), so that out of 40 participants, eight people dropped out of the course, or did not fill out the questionnaire completely. Other information obtained from participants is about the number of lectures (calculated in credit units) of 15 to 23 credits (M = 20.25; SD = 1.70). All participants were divided into three small classes (one class of about 14 people), taught by two lecturers, who each had one and two classes being taught. All materials and assignments are more or less the same, with a 100% online format, both synchronous and asynchronous.

In general, each assignment and test has a value that is categorized as low mental workload to high mental workload as described in **Table 2** to **Table 4.** In general, most of the students considered that each task had a moderate workload (median 66.435), although some considered a high workload and fewer considered a low workload. The two exams are given, and both the midterm and final tests were also considered to be more or less the same workload as the other four assignments.

Categorization was based on gender, GPA (cut-off point 3.56), and the number of courses taken (cut-off point 20 credits) did not make a difference in perceptions of student workloads, this was proven by testing non-parametric statistical data by Kruskal-Wallis and Mann-Whitney. Since the six assignments and exams had an equal workload, based on the average that had been

assessed, it is known that the lightest to severe factors in the typography course were:

Table 2. Descriptive Statistics Questionnaire of Nasa TLX

	N	Min.	Max.	Mean	Std. Deviation
Course load (hours) at university	32	15.0	23.00	20.25	1.70
GPA	32	2.29	3.95	3.56	.42
Assignment					
Assignment 1: Collage Digital Poster of the History of Typography (one face-to-face meeting)	32	37.8	75.33	56.73	10.74
Assignment 2: Characters, (three face-to-face meetings)	32	25.3	92.67	62.60	15.50
Assignment 3: Logo Design (five face-to-face meetings)	32	37.3	100.00	63.61	14.33
Assignment 4: Eight Typographic Alignments in Poster Design (five face-to-face meetings)	32	22.0	86.0	64.50	13.76
Assignment 5: Font Design Set—Including in the midterm test score (one face-to-face meeting)	32	19.0	93.33	62.41	16.47
Assignment 6: Font Design Set — Including in the final test score (one face-to-face meeting)	32	20.00	90.33	65.49	15.30

Table 3. Questionnaire Recapitulation of Nasa TLX

	Assignment 1	Assignment 2	Assignment 3	Assignment 4	Assignment 5	Assignment 6
Average	56.73	62.61	63.62	64.50	62.41	65.49
Median	56.165	67.065	63.165	63.4	65.965	66.435
Low Mental Workload (<50)	9	6	5	2	7	4
Moderate Mental Workload (50-70)	20	13	15	17	13	14
High Mental Workload (>70)	3	12	11	12	11	14

Table 4. Factor Value of Mental Workload

Mental Workload Factor	Total Value	Average after dividing by 15 (representing 6 factors)	Perception of mental workload factor (six times mental workload factor)
Mental Demand	122	8	48.8 (R)
Physical Demand	71	5	28.4 (R)
Temporal Demand	144	10	57.6 (S)
Performance	232	15	92.8 (T)
Effort	265	18	106 (T)
Frustration	104	7	41.6 (R)

physical demand (71), frustration (104), mental demand (122), temporal demand (144), performance (232) and effort (265). Therefore, since the cut-off point of NASA-TLX was below 50, 50-70 and above 70, the physical demand, frustration, and mental demand factors had a low workload; the temporal demand factor had a medium workload, while performance and effort had a high workload. The data that has been presented reveals that the lightest to severe factors in the typography course were physical demand (71), frustration (104), mental demand (122), temporal demand (144), performance (232), and effort (265). The discussion of each factor related to the implementation of typography lectures that have been completed by students as a study sample is presented in **Table 5.**

The next discussion is related to student gender, GPA and the number of courses taken by students did not affect the perception of workload for the typography courses in the odd semester in the 2020-2021 academic year. Students took 15-23 credits with an average GPA of 3.56.

Table 5. The Factor Related to the Implementation of Typography Lectures

Mental Workload Factor		Application of Lectures
Physical demand (71) was low	How much physical activity is needed. A given task is easy or demanding, slow or fast, loose or heavy, quiet or tiring.	• Online lectures without having to go to campus • Independent learning attitude • No manual work, everything is done digitally • An online task collection folder provided in the long term
Frustration (104) was low	At the time of completing the task how insecure, hopeless, irritated, stressed, and irritated or safe, satisfied, and relaxed?	• The material is delivered in a more relaxed manner without having to open camp during the lecture, only at the beginning or when needed. • The material is in .pdf file format. Files that have been stored in online learning applications have been facilitated by the university so that they can be accessed by students whenever they need them. • Flexible hours of assistance. It is allowed for personal assistance outside class hours via private WhatsApp, thus giving students a sense of security and relaxation.
Mental demand (122) was low	How much mental activity and perception are required (e.g., thinking, deciding, remembering, searching) Is the task easy or undemanding, simple or complex, demanding or more flexible?	• Assignments are given with clear stages of the process in each week of online lectures so that they are conveyed in a simple, not complex manner. • There is a free digital reference facility that helps students to think, look for references and remember so that it helps in the process of creating works.
Temporal demand (144) was moderate	How much time pressure is felt regarding speed/time for task completion to occur? Is the pace slow and relaxed or fast and frantic?	• The difficulty level of the task is gradual from easy to difficult. The workload is different, adjusted for face-to-face time and assistance. • Every week, some stages must be collected, for students who follow the stages will not be left behind. However, for those who do not follow, it is necessary to catch up at the next meeting.
Performance (232) was high	How satisfied are you with your performance in completing this task?	• The effort is related to performance. During online learning, digital visualization of work that still contains originality requires independence in skills in operating digital design software from each student independently. On the other hand, if the lecture is offline, students can ask friends or lecturers directly. • The completeness of the process and an attractive presentation as standardized by the lecturer must also be made by students. • In addition, the character of students who want to always be perfect in collecting works, some may not be able to manage their time.

The accumulated final score of the four assignments that had been given and completed by students was mostly B+ and A. In other words, the workload given was in accordance with the competency capacity that needs to be achieved by students, because the perceived value of MODERATE was not low and not high. This was in accordance with the consideration that these students did not have only completed the typography course but also other courses, but they are still not stressed.

The perception of workload in the field of effort was the largest among the six other workload benchmarks. This showed that students had put a great effort into completing assignments in the typography course. The researcher assumed that the effort given by students had been rewarded in the form of scores obtained, mostly B+ and A (A was the highest point, with the range of A to C as the pass points).

The consequence of the MODERATE perception of the mental workload in this lecture was that there was an assignment material that was not given to students, namely the material for making editorial designs. This was due to the need for assistance time that was longer than what was planned for the Logo Design and Alignment Poster assignments. Therefore, as a suggestion, it was necessary to add time for formal

assistance for students and lecturers outside of the 16 meetings that have been set, so that one material could be given. Another suggestion was to take a look whether any courses offer similar learning outcome or aim the same goals, as well as to get the competence by mentoring between higher and lower grade of students [17].

Regarding distance learning in this pandemic era, students have been able to adapt to the online learning process that has been going on for two years. Lecturers have also been able to provide stages of how to learn in accordance with the typography course and the material to be conveyed so that students' perceptions of this course have an optimal workload—not heavy and not light. Moreover, both party –student and teacher, should be ready whether the condition might prolong or became regular, as the impact of this pandemic proven better to have online method compare with closing the school temporarily thus makes learner hopeless [18].

However, it still requires detailed guidance from the lecturer at each stage of the process. For diligent students who can understand the direction given, the improvement of their work will directly affect the results of their work for the better than for students who delay the improvement of their work. Therefore, students and lecturers must be disciplined in their time. For example, assistance in the work process needs to be done during the hours provided because out-of-hours assistance via text through the available platforms allows for communication that is not conveyed from and to both directions. In addition, the time that students need to spend completing assignments needs to be considered by the lecturer but from the student side, it is also necessary to arrange a time so that other courses taken in the same semester can also be completed with good grades.

4. CONCLUSSION

The MBKM policy also has an impact on curriculum changes that need to be adjusted. Typography course in visual communication design science is a compulsory subject and affects every work creation. This course is shortened from two semesters to one semester plus two years of online learning. After taking data for one semester on 32 students who completed this course, the output data resulted that students' perceptions of this course had an optimal mental workload—not heavy and not light, or in other words, students were not stressed, and learning outcomes could be achieved. For the optimal perception of workload—not heavy and not light, the appropriate meeting is 16 times with a maximum of four assignments and midterm and final exams. Assignments need to be assessed from light to heavy with meeting hours arranged and adjusted. The process of providing the material is carried out in stages that have been scheduled.

Asynchronous and synchronous learning is thought to be influenced by communication media. This statement is in line with the originator of classical media theory, namely Marshall McLuhan who has the principle that forms of communication develop and affect the essence of their existence because the users are the content [19]. This statement is also in line with the discussion of McLuhan's theory, showing that he focuses on the whole reality that is constructed outside the media itself [20]. In other words, every communication media exists or is designed to be used as intended. Hence, when the media is used to bridge online learning, there will be adaptations made by the users. However, due to a sudden need, every interested party will adapt. Communication media, with its function shifted, automatically has limitations both in terms of features and capabilities. Apart from the communication media used, both lecturers and students also need to make various adjustments to the teaching-learning habits that were previously done face-to-face. This is no exception with learning in typography courses. When the media user cannot adapt and understand the new activity purpose, the perception of the workload automatically becomes no heavier when completing lecture assignments. In the future, we would like to explore students' final artworks which contrast the low and high mental load perceptions.

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