International Conference on Science, Education and Technology

66 Igniting Cutting-Edge Innovations in Science, Technology, Humanities for Sustainable Future



Gedung A Kampus Pascasarjana, Jl. Kelud Utara III, Semarang 50237 Telepon 024-86008700 Ext.900; Faksimile. 024-8449969 Laman: http://pps.unnes.ac.id, Surel: pascasarjana@mail.unnes.ac.id



at the **8 th International Conference on Science, Education and Technology (ISET 2022)** held by Postgraduate Program of Universitas Negeri Semarang (UNNES), Indonesia, on October 15, 2022

POSTGRADUATE PROGRAM UNIVERSITAS NEGERI SEMARANG



Certificate No. 11321/UN37.2/PP/2022

This is to certify

Agus Cahyono as a

Presenter

Semarang, October 15, 2022

HOIONAN REGER Director of Graduate Program

CASARJAN

Prof. Dr. Agus Nuryatin, M.Hum. NIP.196008031989011001

Finding Out the Visual Literacy Ability of College Level through the Analysis of Poster Design and Idea Creativity

Nadia Sigi Prameswari^{1*}, Agus Cahyono¹, Slamet Subiyantoro², Eko Haryanto¹

¹Universitas Negeri Semarang, Indonesia

²Universitas Sebelas Maret, Indonesia *Corresponding Author: nadiasigi@mail.unnes.ac.id

Abstract. The challenge of education in the 21st Century is to create an education that can produce thoughtful human resources who can build social order and economy and are aware of knowledge as an individual in the 21st Century. It is crucial for learning in the present era to prioritize visual literacy skills. Visual literacy skills help the students to be capable of communicating by utilizing visual language structure until they contribute to the more global dialogue organization such as metaverse era. The purpose of this research was to review the poster design, which covers visual literacy standards and visual literacy aspects, to determine the level of students' visual literacy skills in college. This study uses purposive sampling on visual art students from four universities. The data in this study were analyzed using interpretivism. Based on the analysis result of students' work presentation reviewed from the visual skill. Differences in the ability to convey information, effectiveness and efficiency of images, presentation of cultural, social, and historical photos, problem-solving, and creativity. Differences in the quality of work between one individual and another related to standards in visual literacy are influenced by several aspects, namely learning experience, source of visual literacy, and sense experience.

Key words: visual literacy; poster design, students' creativity; visual higher education

How to Cite: Prameswari, N.S., Cahyono, A., Subiyantoro, S., Haryanto, E. (2022). Finding Out The Visual Literacy of College Level Through The Analysis of Poster Design and Idea Creativity. *ISET: International Conference on Science, Education and Technology* (2022), 1243-1248.

INTRODUCTION

Learning is vital to promote visual literacy skills (Lundy & Stephens, 2015). Visual literacy assists students in being able to communicate by utilizing visual grammar so that they can contribute to a more global level of dialogue, such as the Metaverse Era (Lundy & Stephens, 2015). This ability is not only beneficial because of massive technological developments, but the transformation of 21st-century education also has its challenges in improving individual skills, such as visual literacy. The challenge of 21st-century education is to create education that can produce thinkers so that they can participate in building a social and economic order that is aware of knowledge like individuals in the 21st Century (Wijaya et al., 2016).

The main problem today is that the current generation has become a digitally native generation who only consumes it practically (take it for granted), consequently becoming less critical in consuming visuals on various platforms (Brumberger, 2011). The impact on education, millennial learners tend to show less ability and a strong effort in creating or communicating visual messages (Metros & Woolsey, 2006). Their position is only as passive consumers of an increasingly massive visual culture amid the rapid

production of visual signs (Pettersson, 2014). Thus, the role of visual literacy helps someone to understand, interpret, and create visual messages with more meaning and quality in line with the ability to think critically and creatively in solving visual problems.

Literacy can also be identified as a collection of abilities individuals use to communicate with others through visuals (Ausburn & Ausburn, 1978). The American Association of College and Research Libraries published seven visual literacy standards for college students (Arslan & Nalinci, 2014; Matusiak et al., 2019). These standards measure students' abilities ranging from determining the nature and extent of visual material, analyzing the effectiveness and efficiency of images or visual media, interpreting the meaning of visual media, evaluating pictures and visual media sources, using images and visual media effectively, designing and creating visual media, and can analyze related issues in visual media (photos, ethics, law, economics, etc.).

Graphic design as a visual medium also requires good visual literacy skills. One form of graphic design is poster design which has graphic design elements such as markers, symbols, typography and photography or illustrations, applied as visual devices and communication devices that allow them to be used to Nadia Sigi Prameswari, et. al. / International Conference on Science, Education and Technology 2022: 1243-1248

communicate (Danton, 2001).

Dealing with previous studies, research on visual literacy that focuses on studying problems in works of art is still minimal. Therefore, this study tries to analyze the poster design work due to the representation of the DKV student's work produced within the scope of lecture learning in terms of visual literacy skills and creative idea production.

METHODS

This study aims to determine the representation of Visual Communication Design students' work produced in practical lectures regarding visual literacy skills and creative idea production. The samples in this study were visual arts students from four universities, namely Universitas Negeri Semarang, Indonesian Institute of the Art Surakarta, Dian Nuswantoro University, and Universitas Sebelas Maret. Sampling in this study used a purposive sampling technique. According to Sugiyono (2014), purposive sampling is used to determine the number of samples to be studied based on criteria following the research. The data in this study were analyzed using interpretivism, which aims to analyze all the collected data. The interpretivism technique is an approach that seeks to find explanations about social or cultural events based on the perspectives and experiences of the people being studied (Neuman, 2000)

RESULTS AND DISCUSSION

Analysis of student work used visual literacy standards of the University. There are seven standards used in the study of student work. An overall analysis of student work can be seen in the following table

Table 1	Results of Analy	vsis of Students'	Graphic Design Works
Table 1.	Results of Allal	ysis of Students	Oraphic Design works

	Visual Elements (Lopatovska et al., 2016)					
Materia	al Object	Illustration	Typograph y	Colour	Layout	
Figure 1. Poster "Recycle"		The main illustration of bitmap object-based trash can be processed by tracing	The "recycle" headline is written in Arial black font, sans serif typeface. It does not meet the principle of readability typography	The colour composition consists of several elements: Red, grey, white. Combinatio n of primary and natural colours	Axial layo main illust shown clo placed in t (black out)	tration is se up and he frame line)
	eracy standards o lesearch Librarie					
Information	Image	Cultural,	Aesthetics	Problem	Image	Image
Submission	Effectiveness	social and	and	Solving and	Meaning	Presentatio
(Standard 1)	and	historical	Drawing	Creativity	(Standar	n Etiquette
	Efficiency (Standard 2)	images (Standard 3)	Techniques (Standard 4)	(Standard 5)	d 6)	(Standard 7)
The message	The purpose	No cultural,	Poster with	It does not	There is	It does not
conveyed is	of delivering	social or	a placard	answer the	no	deviate
not	the message	historical	style made	issue, and	meaning	
informative	and the	images	using basic	creativity is	in the	
	function of	appear	tracing	not visible	message	
	the poster was not		techniques using		in the picture	
	achieved		Adobe		picture	
	uenieveu		Illustrator			

Nadia Sigi Prameswari, et. al. / International Conference on Science, Education and Technology 2022: 1243-

Visual Elements (Lopatovska et al., 2016)					et al., 2016)	
Material ObjectImage: strength of the streng		Illustration	Typograph y The headline is written in a sans serif typeface. The selection of fonts can meet the functional aspects and the principle of readability. It's just that the compositio n of the letters is not explored	Colour The dominance of dark brown on the background and red on the word "HELP". Natural colours are shown in the combination of brown, grey and black.	Layout	
		The main illustration of a man is made using digital drawing and digital colouring techniques			Axial layouts. The main illustration is shown close-up in the middle.	
Vieual lita	roov standarda o	f universities h	optimally	mariaan Associ	iation of College and	
	esearch Librarie					
Information Submission (Standard 1)	Image Effectiveness and Efficiency (Standard 2)	Cultural, social and historical images (Standard 3)	Aesthetics and Drawing Techniques (Standard 4)	Problem Solving and Creativity (Standard 5)	ImageImageMeaningPresentatio(Standarn Etiquetted 6)(Standard7)	
The message is informative	The purpose of delivering the message and the function of the poster are achieved	There is a cultural and social image	Poster made with digital drawing technique via Adobe Photoshop	Answering problems even though creativity is less visible	There is It does not meaning deviate in the message in the picture	
		V	/isual Element	ts (Lopatovska	et al., 2016)	
Material Object		Illustration	Typograph y	Colour	Layout	
Pertimbangkan Reputusanmul Orac Figure 3. Poster "Consider your need."		The main illustration of an orangutan is made using digital imaging techniques (bitmap	Headlines are written in a sans serif typeface. The selection of fonts can	The dominance of brown on orangutans and trees as the main illustration is a natural colour	Axial layouts. The main illustration is shown in the middle.	

Nadia Sigi Prameswari, et. al. / International Conference on Science,	Education and Technology 2022: 1243-
1248	

		processing).	meet the			
			functional			
			aspects and the			
			principle of readability			
Visual lite	eracy standards o	f universities ba		merican Associ	iation of Col	lege and
R	esearch Librarie					
Information	Image	Cultural,	Aesthetics	Problem	Image	Image
Submission	Effectiveness	social and	and	Solving and	Meaning	Presentatio
(Standard 1)	and	historical	Drawing	Creativity	(Standar	n Etiquette
	Efficiency (Standard 2)	images (Standard 3)	Techniques (Standard	(Standard 5)	d 6)	(Standard 7)
	(Stalidard 2)	(Stalidard 5)	(Stalidard 4)			7)
Informative	The purpose	Visualizatio	Posters	Answering	There is	It does not
message	of delivering	n contains a	made with	the issue	meaning	deviate
C	the message	social image	digital		in the	
	and the	-	imaging		message	
	function of		techniques		in the	
	the poster are		(processing		picture	
	achieved		bitmaps)			
			through Adobe			
			Photoshop			
		V	•	ts (Lopatovska	et al., 2016)	
Materia	al Object	Illustration	Typograph	Colour	Layout	
Aun			<u>y</u>			-
SELALU	INGAT	Illustrations made with	Headlines are written	The dominance	Axial layouts. The main illustration is shown in the middle.	
3M YA		vector-based		of pink on		
1 WIDS		digital	serif	the	5110 WH 111 t	ne maare.
50	- ile	techniques	typeface.	background		
and the second second	MENCUCI TANGAN	*	~ .	is an		
	ENGGUNAKAN BABUN		The	excellent		
			selection of	colour that		
			fonts can	gives a		
(3) (MENLAGA	JARAK		meet the	bright		
(TEMACEDULENE	-		principle of	impression.		
> 🔁			readability but cannot			
St	* 14		meet the			
0:						
2 MENGGUNA	KAN MASKER		visibility aspect			
			visibility			
			visibility			
			visibility			
Figure 4.	Poster 3M	f universities ba	visibility aspect	merican Associ	ation of Col	lege and
Figure 4. Visual lite			visibility aspect ased on The As			•
Figure 4. Visual lite	Poster 3M eracy standards o		visibility aspect ased on The As			•
Figure 4. Visual lite R Information Submission	Poster 3M eracy standards o desearch Libraries Image Effectiveness	s (ARCL) (Arsl Cultural, social and	visibility aspect ased on The As an & Nalinci, Aesthetics and	2014; Hattwig Problem Solving and	et al., 2013) Image Meaning	Image Presentatio
Figure 4. Visual lite Information	Poster 3M eracy standards o desearch Libraries Image Effectiveness and	s (ARCL) (Ars Cultural, social and historical	visibility aspect ased on The As and <u>Nalinci,</u> Aesthetics and Drawing	2014; Hattwig Problem Solving and Creativity	et al., 2013) Image Meaning (Standar	Image Presentatio n Etiquette
Figure 4. Visual lite R Information Submission	Poster 3M eracy standards o tesearch Libraries Image Effectiveness and Efficiency	s (ARCL) (Arsl Cultural, social and historical images	visibility aspect ased on The Ar an & Nalinci, Aesthetics and Drawing Techniques	2014; Hattwig Problem Solving and	et al., 2013) Image Meaning	Image Presentatio n Etiquette (Standard
Figure 4. Visual lite R Information Submission	Poster 3M eracy standards o desearch Libraries Image Effectiveness and	s (ARCL) (Ars Cultural, social and historical	visibility aspect ased on The As and <u>Nalinci,</u> Aesthetics and Drawing	2014; Hattwig Problem Solving and Creativity	et al., 2013) Image Meaning (Standar	Image Presentatio n Etiquette

Nadia Sigi Prameswari, et. al. / International Conference on Science, Education and Technology 2022: 1243-1248

The message conveyed is less informative because the letters are presented in a small size, so they are not read	The purpose of delivering the message and the function of the poster are achieved	No cultural, social or historical images appear	Poster with a vector- based infographic approach created in Adobe Illustrator	It does not answer the issue, and creativity is less visible	There is meaning in the message in the picture	It does not deviate
clearly.						

Differences in the ability to convey information, effectiveness and efficiency of images, presentation of cultural, social, and problem-solving, historical photos, and creativity. This is influenced by the learning experience taken during lectures and the visual literacy experience gained during the learning process. Differences in the quality of work between one individual and another related to standards in visual literacy are influenced by several aspects, namely: the experience gained by individuals during the learning process, sources of visual literacy, and the sensory experience of each individual. These things influence each other and greatly determine the quality of the visual elements produced and their standard of visual literacy. The strength of these factors can make a person able to create visual messages in an informative, effective and efficient manner, both implicitly and explicitly. This is in line with the ability of creative ideas in the final presentation of the resulting work.

CONCLUSION

The role of visual literacy assists someone in understanding, interpreting, and creating visual messages with more meaning and quality in line with critical and creative thinking skills in solving visual problems. In the analysis of the representation of four student works in terms of visual literacy skills. Besides, many differences were influenced by several aspects, namely: the experience gained by individuals during the learning process, sources of visual literacy, and the sensory experiences of each individual. This study can be explored the environment and the forming ecosystem that affects a person's visual literacy competence development. It's because this study has not involved the structure of forming visual literacy skills in students, such as teachers, family or parents, and the surrounding environment that affects a person.

ACKNOWLEDGEMENT

Thank you to the Postgraduate of Universitas Negeri Semarang for supporting this research.

REFERENCES

- Arslan, R., & Nalinci, G. Z. (2014). Development of visual literacy levels scale in higher education. *Turkish Online Journal of Educational Technology*, 13(2), 61–70.
- Ausburn, L. J., & Ausburn, F. B. (1978). Visual Literacy: Background, Theory and Practice. *Programmed Learning and Educational Technology*, *15*(4), 291–297. https://doi.org/10.1080/0033039780150405
- Brumberger, E. (2011). Visual literacy and the digital native: An examination of the millennial learner. *Journal of Visual Literacy*, *30*(1), 19–47. https://doi.org/Doi: 10.1080/23796529.2011.11674683
- Danton, S., & Sunarto, W. (2001). *Tipogrqfi dalam Desain Grafis*. Jakarta: Gramedia Pustaka Utama.
- Hattwig, D., Bussert, K., Medaille, A., & Burgess, J. (2013). Visual Literacy Standards in Higher Education: New Opportunities for Libraries and Student Learning. *Portal: Libraries and the Academy*, 13(1), 61–89.
- Lopatovska, I., Hatoum, S., Waterstraut, S., Novak, L., & Sheer, S. (2016). Not just a pretty picture: visual literacy education through art for young children. *Journal of Documentation*, 72(6), 1197–1227. https://doi.org/https://doi.org/10.1108/JD-02-2016-0017
- Lundy, A. D., & Stephens, A. E. (2015). Beyond the Literal: Teaching Visual Literacy in the 21st Century Classroom. *Procedia - Social and Behavioral Sciences*, 174, 1057–1060. https://doi.org/10.1016/j.sbspro.2015.01.794
- Matusiak, K. K., Heinbach, C., Harper, A., & Bovee, M. (2019). Visual Literacy in Practice: Use of Images in Students' Academic Work. *College and Research Library*, 80(1), 123–139.

https://crl.acrl.org/index.php/crl/article/view /16950/19370

- Metros, S. E., & Woolsey, K. (2006). Visual Literacy: An Institutional Imperative. *EDUCAUSE Review*, 41(3), 80–81.
- Neuman, W. L. (2000). Social Research Methods: Qualitative and Quantitative Approaches. In *Teaching Sociology* (Fourth). Boston, Massachusetts, USA: Allyn and Bacon.
- Pettersson, R. (2014). Information Design Theories. Journal of Visual Literacy, 33(1), 1–94.

https://doi.org/10.1080/23796529.2014.116 74713

- Sugiyono. (2014). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung: Alfabeta.
- Wijaya, E. Y., Sudjimat, D. A., & Nyoto, A. (2016). Transformasi Pendidikan Abad 21 Sebagai Tuntutan Pengembangan Sumber Daya Manusia di Era Global. *Prosiding Seminar Nasional Pendidikan Matematika 2016*, 1, 263–278.