



## Analysis of Solar system Learning Posters Class 6 SDN Banjarsari 01

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### ABSTRACT

**Background:** A poster is a graphic design that contains a composition of pictures and letters on large or small paper. Posters have the power to convey messages visually and with the right supporting elements, the ideas in the poster can be easily remembered by the target audience.

**Purpose:** This study aims to determine the extent of student understanding and student success in making educational posters about learning the solar system for grade 6 SDN Banjarsari 01.

**Design and methods:** This research used mixed analysis methods, namely qualitative and quantitative. The approach used in this research is using a mixed approach. The data collection technique was carried out by analyzing the solar system posters made by grade 6 students based on the 5 correct criteria of Schwab's poster theory. This data analysis was carried out by collecting posters that had been made by students in grade 6 at SDN Banjarsari 01.

**Results:** Research results Based on the results of the study, it can be concluded that of the 16 posters that had been made and collected by grade 6 students at SDN Banjarsari 01 did not meet the 5 criteria of Schwab theory, only there were 7 posters that met the criteria of Schwab theory but only in the Getting attention and Showing Advantage categories, the rest only met the Getting Attention category. There are several posters that meet the conventions of poster language.

**Keywords:** space objects, solar system, learning, posters

### Introduction

Celestial bodies or astronomical objects are actually physical objects or structures that exist in the observable universe. The observable universe consists of the many galaxies and other matter observable from Earth today. The universe has galaxies of many different shapes. A galaxy is a collection of stars bound together by gravitational forces. The galaxy consists of many planets that surround it (Winter et al., 2021). In it there are very many celestial bodies. Within the Milky Way galaxy is our solar system. The solar system is a collection of the sun, planets and other celestial bodies (Putra & Nandiyanto, 2022). The solar system is a unit consisting of the sun as the center, and surrounded by planets, moons, meteors, comets and other celestial bodies that are constantly moving. In the solar system, the sun is the only celestial body that can emit its own light. Meanwhile, other celestial bodies can only reflect light (Hunziker et al., 2020). The solar system can also be said to be a place where the planets and celestial bodies are located while continuing to circle the sun. They also think that in the solar system there are planets that move around the sun as the center (revolution). Every planet in the solar system is in an elliptical orbit called an orbit. As long as it stays in its orbit, the planets don't collide with each other.

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According to the Nebula Theory or the fog theory, it states that at first the solar system was still a giant collection of fog. The fog which is the origin of the solar system is composed of dust, ice and gas with a high hydrogen content (Imron et al., 2019). Long before scientists uncovered or discovered theories about the solar system, Allah had already explained about the universe in his word (Suryandari et al., 2021). Humans are looking for the truth or researching again using science many theories found in researching about space objects and the solar system such as the origin of the earth, stars and other celestial bodies.

Learning is assistance provided by educators for students in order to gain knowledge (Priscilla & Yudhyarta, 2021). Learning itself is a system that helps individuals learn and interact with learning resources and the environment. According to Gagné (1974), learning is a set of external events designed to support several internal learning processes. Gagne put forward his theory more fully by saying that learning is intended to produce learning, external situations must be designed in such a way as to activate, support, and maintain the internal processes contained in each learning event.

According to Skinner, learning is the interaction of students with educators and learning resources in a learning environment (Braun et al., 2019). In the learning process there needs to be interaction between educators. Those who convey the material or teaching materials need reciprocity to find out whether the learning process is successful according to the goals desired by the educator. Education to Having knowledge that is able to solve problems and accept or reject objects based on an assessment of these objects.

In this study using poster media, namely regarding space objects as an example of making educational posters. Poster media can attract students' attention and can help make it easier for teachers to convey learning material. According to Dinar Puti (2017, p. 321) states that by using poster media students will further understand the learning material delivered because students see, experience and feel the object conveyed by the teacher directly (Aspahani et al., 2020). Poster is one of the visual communication media that is often used to publish information or communicate it to the public. Poster is a graphic design that contains a composition of pictures and letters on large or small paper (Afdali et al., 2013). Posters can be referred to as learning media that can be given to students, especially at the Elementary School (SD) level. Posters can also be interpreted as the art of conveying messages by combining layouts and designs to convey messages to the wider community. Posters are generally placed in appropriate areas in public spaces that function to convey messages to the general public (Zandieh & Seifpour, 2020). Posters that appear in cyberspace or the internet are considered to be very effective and efficient in the purpose of conveying certain information or messages to the wider community, because now people are so familiar with social media. On the poster there are writings and pictures containing material that will be taught by the teacher to students, the language in the poster is short, concise and communicative. Posters are given pictures and colors to make them even more attractive.

A number of related studies that have been carried out before include to educate (Yonatia & Susanti, 2022; Effendy et al, 2022). Knowing the effectiveness of poster media (Trianasari et al, 2018; Aspahani et al, 2020). To find out the development of posters (Ayuni et al, 2020). Disclose learning outcomes (Kusumawardani et al., 2018; Hildayanti et al., 2018). To design posters for elementary student (Sumardani et al., 2019). To change behavior in maintaining environmental cleanliness (Habib & Rajagukguk, 2022).

Based on the illustration of the phenomenon and a number of related studies, the researcher revealed the objectives carried out, namely the extent of student understanding and student success in making educational posters about learning the solar system for class 6 of SDN Banjarsari 01.

## Methods

This research is a mixed methods research, namely qualitative and quantitative. This method relies on measurement and observation instruments to describe some phenomena of interest. Qualitative research is research that describes phenomena or conditions that occur during research and describes conditions and presents data based on interviews, observations, and documentation (Moleong, 2014). The definition of a quantitative approach is an approach that principally uses postpositivism in developing knowledge (such as relating causation, reduction to variables, hypotheses and specific questions with measurement, observation, and theory testing), using research strategies such as surveys and experiments that require data statistics.

The technique used in this research is a data collection technique, which in this study uses data collection in the form of observations and educational poster projects about the solar system. The poster data collection technique made by students is a process carried out by researchers to obtain the data and requirements needed by researchers. The data analysis technique is to provide an assessment on the posters that have been made by students. The data are 16 educational poster projects about the solar system at SDN Banjarsari 01. Poster collection was made on HVS paper, all posters were analyzed based on 5 theoretical criteria for writing good schwab posters.

Schwab's theory of writing a good poster has 5 conditions that must be met. Schwab's theory of writing a good poster defines a good poster as having 5 criteria that must be met (Schwab, 2016). The five criteria are getting attention, showing advantage, proving, persuading, asking for action (Sya & Helmanto, 2020). These criteria serve as instruments to assess the 5 posters that are categorized as good posters.

## Findings & Discussion

### Findings

The results of this study found that all the posters that had been made by students of class 6 at SDN Banjarsari 01 did not fulfill the 5 schwab theory requirements but had fulfilled the linguistic rules of the poster. The findings are supported in the analysis of the following criteria.

**Table 1 analysis of poster criteria**

| Category          | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 | P13 | P14 | P15 | P16 |
|-------------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|
| Getting Attention | √  | √  | √  | √  | √  | √  | √  | √  | √  | √   | √   | √   | √   | √   | √   | √   |
| Showing Advantage |    |    |    | √  |    | √  |    | √  | √  |     |     | √   |     | √   | √   |     |
| Proving           |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |
| Persuading        |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |
| Asking for action |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |

### And: P = poster

Getting Attention is attracting the attention of those who see it. Getting attention in this research is to give appreciation to the students who have made the posters, their posters attract the attention of those who see them in terms of color, the shape of the space objects, the symbols that are made and the layout of the planets that are made. The researcher appreciates the students who are willing to try to make this educational poster by giving a getting attention assessment to the posters that have been made by students.

### Discussion

Posters are one of the learning media which of course exist in every school, posters are media in which there are images that combine visual elements such as lines, symbols, pictures, and words to attract the attention of the reader. Posters have the power to convey messages visually and with the right supporting elements, the ideas in the poster can be easily remembered by the target audience. This is in line with Megawati's opinion (2017) which states that posters with attractive pictures and colors will be very prominent and effective in instilling an idea (Jessica Yonatia, 2022). With poster learning students will appear creative in making these posters, they will express their creative ideas so that they attract the attention of those who see and read them. At first, posters were used as marketing media for a company, which are commonly called commercial posters. But it turns out that the types and purposes of making posters are more diverse than just being a means of introducing and offering products and services. One type of poster that is often found in the world of education is educational posters. Educational posters are a means for students to support their educational process. Educational posters have benefits for students such as providing education about school learning, as a reminder in learning, and also as an example during learning.

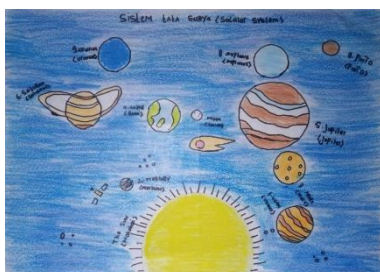
This research is an educational poster in which 6th grade students at SDN Banjarsari 01 make educational posters with the theme determined by the researcher, namely the solar system. The researcher gave directions for writing posters to grade 6 students. When making posters (1) used language that was easy to understand, (2) combined interesting pictures with writing, (3) made it as attractive as possible in order to attract attention, (4) Keep sentences short and clear. In educational posters about the solar system we can provide information to readers about the layout of the planets, and the sun, providing information about what planets are in this solar system. Giving assignments to make posters can train students' creativity in writing, construct sentences correctly, and of course provide learning for students.



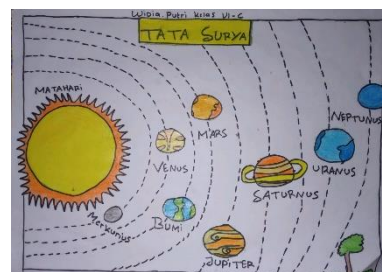
**Figure 1 (poster 4)**



**Figure 2 (poster 6)**



**Figure 3 (poster 8)**



**Figure 4 (poster 9)**



**Figure 5 (poster 12)**



**Figure 6 (poster 13)**



**Figure 7 (poster 15)**



**Figure 8 (poster 16)**

In this poster 4 does not meet the 5 criteria of the Schwab theory, this poster only fulfills 2 of them getting attention and showing advantage. According to the researcher, the poster attracts attention and there is also an explanation that can provide information for the reader and also benefits for the poster.

Poster 6 does not meet the 5 criteria of Schwab theory, this poster only fulfills 2 of them getting attention and showing advantage. According to the researcher, the poster attracts attention. In the pictures, not only planets are made, but there are other pictures that make this poster interesting, such as meteors, rockets and space satellites. The explanation of objects in outer space is clear.

Poster 8 does not meet 5 criteria from Schwab theory, this poster only fulfills 2 of them getting attention and showing advantage. According to researchers, this poster attracts readers' attention because it is combined with attractive colors, good pictures and there are also several other space objects that can add insight and precise explanations, and are nominated with pictures.

Poster 9 does not meet the 5 criteria of Schwab theory, this poster only fulfills 2 of them getting attention and showing advantage. According to the researchers, this poster attracts attention, combined with colors that make this poster attract attention and also attract the attention of researchers because in outer space there are trees that make this poster a question.

Poster 12 does not meet 5 criteria from Schwab theory, this poster only fulfills 2 of them getting attention and showing advantage. This poster attracts the reader's attention because there are pictures that match the original form such as Saturn having rings, appropriate coloring, and easy-to-understand explanations, using good and correct language in providing information.

Poster 13 does not meet the 5 criteria of Schwab theory, this poster only meets 1 of the 5 criteria of Schwab theory, according to this study it is interesting with pictures or patterns



made by students, because of the combination of colors that can be questioned, why is the sun red?, the layout of the planets parallel.

Poster 15 does not meet 5 criteria from Schwab theory, this poster only fulfills 2 of them getting attention and showing advantage. According to the researchers, this poster is interesting from the appearance of the images, the colors combined and the explanation of the planets and their distances which can add insight to the reader and provide benefits for the poster.

Poster 16 does not meet the 5 criteria of Schwab theory, this poster only fulfills 1, namely getting attention, according to the researchers this poster is quite interesting from the appearance of the pictures and colors and also the layout made by students.

## Conclusion

Based on the results of the study, it can be concluded that of the 16 posters that have been made and collected by grade 6 students at SDN Banjarsari 01 that do not meet the 5 criteria for schwab theory, there are only 7 posters that meet the criteria for schwab theory but only in the Getting attention and Showing Advantage categories, the rest are only fulfills the Getting Attention category only. There are several posters that meet the conventions of poster language. For grade 6 elementary school students, it can be said that they are quite good at making posters, students are also able to understand the material well before the researcher gives the task of making posters. Students can make pictures or symbols well, combine colors well, provide explanations using good and correct language in providing information to who sees it.

This poster making activity can be done by high grade students, because they can already understand how to make sentences well, with this poster making activity students can express their creative ideas, hone students' drawing skills, students will appear creative in making posters to attract the attention of those who see and read it.

## References

- Afdali, R., Syafwan, & Ishakawi. (2013). PROMOSI EVENT OTOMOTIF KAPACAK OPEN DRAG RACE DI PADANG MELALUI MEDIA POSTER. *Jurnal Desain Komunikasi Visual*, 2(1).
- Aspahani, E. L., Nugraha, A., & Giyartini, R. (2020). Rancangan Media E-Poster Berbasis Website Pada Pembelajaran IPA di Sekolah Dasar. *PEDADIDAKTIKA: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 7(2), 158–167. <https://doi.org/10.17509/pedadidaktika.v7i2.25458>
- Ayuni, V. S., Munandar, H., & Junita, S. (2020). Pengembangan media poster pelestarian makhluk hidup untuk meningkatkan pengetahuan siswa Kelas IV Sekolah Dasar pada pembelajaran ipa tema 6 subtema 3. *Jurnal Ilmiah Mahasiswa Pendidikan*, 1(1).
- Braun, S. S., Roeser, R. W., Mashburn, A. J., & Skinner, E. (2019). Middle School Teachers' Mindfulness, Occupational Health and Well-Being, and the Quality of Teacher-Student Interactions. *Mindfulness*, 10(2), 245–255. <https://doi.org/10.1007/s12671-018-0968-2>
- Effendy, D., Bahar, H., Muchtar, F., Lestari, H., & Tosepu, R. (2022). Pendidikan Gizi Seimbang untuk Mencegah Stunting Menggunakan Media Video dan Poster Pada Murid Sekolah Dasar di SDIT Al Wahdah Kendari. *Karya Kesehatan Journal of Community Engagement*, 3(01), 21–27. <https://doi.org/10.46233/k2jce.v3i01.733>
- GAGNÉ, R. M. (1974). Educational Technology and the Learning Process. *Educational Researcher*, 3(1), 3–8. <https://doi.org/10.3102/0013189X003001004>
- Hunziker, S., Schmid, H. M., Mouillet, D., Milli, J., Zurlo, A., Delorme, P., Abe, L., Avenhaus, H., Baruffolo, A., Bazzon, A., Boccaletti, A., Baudoz, P., Beuzit, J. L., Carbillet, M., Chauvin, G., Claudi, R., Costille, A., Daban, J.-B., Desidera, S., ... Wildi, F. (2020). RefPlanets: Search for reflected light from extrasolar planets with SPHERE/ZIMPOL. *Astronomy & Astrophysics*, 634, A69. <https://doi.org/10.1051/0004-6361/201936641>
- Imron, M. Al, Sodikin, S., & Romlah, R. (2019). Meteor dalam Perspektif Al-Qur'an dan Sains.

- Indonesian Journal of Science and Mathematics Education, 2(3), 388–398.  
<https://doi.org/10.24042/ijsme.v2i3.4365>
- Habib, M., & Rajagukguk, K. P. (2022). PENGARUH PEMANFAATAN MEDIA POSTER TERHADAP PERILAKU SISWA DALAM MENJAGA KEBERSIHAN LINGKUNGAN DI SEKOLAH DASAR. *Jurnal Sintaksis*, 4(1), 1-10.
- Hidayanti, H., Samsuri, A. S., & Arief, T. A. (2018). Pengaruh penggunaan media poster dalam menulis karangan narasi terhadap hasil belajar siswa pada mata pelajaran bahasa indonesia kelas v sd negeri 77 kanaeng kabupaten takalar. *JKPD (Jurnal Kajian Pendidikan Dasar)*, 3(2), 518-529.
- Kusumawardani, N., Siswanto, J., & Purnamasari, V. (2018). Pengaruh model pembelajaran kooperatif tipe STAD berbantuan media poster terhadap hasil belajar peserta didik. *Jurnal Ilmiah Sekolah Dasar*, 2(2), 170-174.
- Moleong, L. J. (2014). Metodologi Penelitian Kualitatif (Edisi Revi). PT. Remaja Rosdakarya.
- Priscilla, C., & Yudhyarta, D. Y. (2021). Implementasi Pilar-Pilar Pendidikan UNESCO. *Asatiza: Jurnal Pendidikan*, 2(1), 64–76. <https://doi.org/10.46963/asatiza.v2i1.258>
- Putra, D. S., & Nandiyanto, A. B. D. (2022). Application of the Use of Digital Media in Learning Solar System in Elementary School. *International Journal of Research and Applied Technology*, 2(1), 108–113. <https://doi.org/10.34010/injuratech.v2i1.6730>
- Schwab, V. O. (2016). *How to Write a Good Advertisement: A Short Course in Copywriting*. Pickle Partners Publishing.
- Sumardani, D., Wulandari, A., & Doriza, S. (2019, October). Penerapan Teknologi Augmented Reality pada Media Pembelajaran Poster Tatasurya. In *Prosiding Seminar Nasional Fisika (E-Journal)* (Vol. 8, pp. SNF2019-PE).
- Suryandari, P., Hasan, H., Raya, A., Rahman, Y., & Kusmana, K. (2021). Al-Quran Perspective On Architectural Environmentally Friendly in the Aspect of Functions Building. *Proceedings of the 3rd International Colloquium on Interdisciplinary Islamic Studies, ICIIS 2020, 20-21 October 2020, Jakarta, Indonesia*. <https://doi.org/10.4108/eai.20-10-2020.2305171>
- Sya, M. F., & Helmanto, F. (2020). Writing Poster at Higher Education: Victor Schwab Theory Analysis. *Wanastra: Jurnal Bahasa Dan Sastra*, 12(1), 25–31.  
<https://doi.org/10.31294/w.v12i1.7585>
- Trianasari, S., Herawati, H., & Gunawan, I. M. (2018, October 10). Media papan petak PGS dan Poster pada Penyuluhan Gizi terhadap Pengetahuan Gizi Seimbang Siswa Sekolah Dasar. *JURNAL NUTRISIA*, 20(2), 61-66.  
<https://doi.org/https://doi.org/10.29238/jnutri.v20i2.102>
- Winter, A. J., Kruijssen, J. M. D., Longmore, S. N., & Chevance, M. (2021). Publisher Correction: Stellar clustering shapes the architecture of planetary systems. *Nature*, 590(7844), E14–E14.  
<https://doi.org/10.1038/s41586-020-03096-5>
- Yonatia, J., & Susanti, E. (2022). PERANCANGAN POSTER EDUKATIF MENGENAI PENCEGAHAN COVID-19 UNTUK ANAK PRA SEKOLAH DAN SEKOLAH DASAR. *Demandia : Jurnal Desain Komunikasi Visual, Manajemen Desain, Dan Periklanan*, 7(2), 291-316. doi:10.25124/demandia.v7i2.4341
- Zandieh, M., & Seifpour, Z. (2020). Preserving traditional marketplaces as places of intangible heritage for tourism. *Journal of Heritage Tourism*, 15(1), 111–121.  
<https://doi.org/10.1080/1743873X.2019.1604714>