

ABSTRACT

The rapid development of infrastructure and the intensification of artificial lighting in urban areas, particularly in Bandung City, have led to an increase in light pollution. This phenomenon reduces the quality of the night sky and disrupts astronomical observations at the observatory. Formal school curricula have yet to include the topic of light pollution, resulting in limited awareness among adolescents regarding its negative impacts and a lack of understanding about the importance of preserving the observatory's function. This research identifies two main issues, the scarcity of formal information and media on light pollution targeted at adolescents aged 12–15 in Bandung, and the absence of visual concepts that effectively communicate the impact of light pollution on the preservation of the Bosscha Observatory. The design aims to enhance adolescents understanding of how light pollution affects the effectiveness of astronomical observation at Bosscha and to develop appropriate and engaging 2D animation concept art for early teens as a foundation for information media pre-production. The research adopts a qualitative approach through in-depth interviews with an astronomy expert from Bosscha, a concept artist, and early adolescents. Additionally, direct and indirect observations and literature studies were conducted to support the theoretical review of light pollution and visual concept development techniques. The collected data were analyzed descriptively, narratively, and visually to inform the design of the visual concept. The target audience shows a preference for cartoon-style animation with expressive characters and simple environments. The design outcomes include four characters and background settings depicting the streets of Lembang and the Koepel building. This concept art is expected to serve as a foundation for producing informative animation that fosters attitudinal change and concrete support for light pollution reduction efforts.

Keywords: *Light Pollution, Bosscha, Adolescents, Information, Concept Art*