

Implementation of the Camera Department Workflow in the Production of the Film "Mimpi Keluarga Sempurna" (The Perfect Family Dream) in the Yogyakarta Film Academy Alumni Incubator Program

Ardian Friatna^{1*}  <https://orcid.org/0009-0006-6474-6380>

¹Yogyakarta Film Academy, Yogyakarta, Indonesia

*Corresponding author: ardianfriatna@afy.ac.id

ABSTRACT

The camera department workflow plays a strategic role in maintaining visual quality consistency and improving production efficiency, especially in vocational education environments that emphasize practical skills. This study analyzes the application of the camera department workflow in the pre-production stage of the film *Mimpi Keluarga Sempurna* (The Perfect Family Dream), which was developed in the Yogyakarta Film Academy Alumni Incubator Program as a project-based learning model. The method used was descriptive qualitative with a case study design through participatory observation, in-depth interviews, and analysis of pre production documents such as shot lists, script breakdowns, equipment lists, camera test notes, recce, and photoboards. The study focused on the main stages of the camera workflow: DOP director meetings, visual reference research, shot list preparation, camera and lens planning, camera/look tests, blocking simulations, interdepartmental coordination, and photoboard preparation as a visual map of production. The results of the study show that a systematic camera workflow is able to harmonize the director's vision and the DOP's visual design through documented creative communication. Thorough technical preparation including lens planning, camera tests, and blocking has been proven to reduce technical risks on location and increase shooting time efficiency. Pedagogically, this research offers an applicable camera department workflow model for strengthening film vocational curricula and can be used as a pre-production operational standard in educational institutions and independent productions.



Copyright © 2025 Authors This is an open access article under CC-BY-NC 4.0 license.

ARTICLE INFO

Keywords:

camera department workflow, film pre-production, cinematography, participatory observation, film vocational education

Article History:

Received: December 7, 2025

Revised: December 26, 2025

Accepted: December 26, 2025

Published: December 30, 2025

How to Cite in A.P.A. Style:

Friatna, A. (2025). Implementation of the Camera Department Workflow in the Production of the Film "Mimpi Keluarga Sempurna" (The Perfect Family Dream) in the Yogyakarta Film Academy Alumni Incubator Program. *Journal of Communication, Religious, and Social Sciences*, vol 3 (2), 60-70.

Introduction

The development of the film and screen content industry in Indonesia has occurred in parallel with the strengthening of vocational education policies that emphasize the direct connection between the learning process and the needs of the creative workforce. In the realm of film production, cinematography occupies a central position as it is the primary medium for articulating narrative, atmosphere, and audience experience through camera setup, lenses, movement, and lighting. Therefore, strengthening the capacity of the camera department cannot rely solely on technical mastery of tools, but also on systematic and

reflective management of the pre-production workflow. In the world of higher education in arts and vocational training in Indonesia, various journals and research reports emphasize the urgency of real film production-based learning as a means of developing students' professional competencies. The Yogyakarta Film Academy Alumni Incubator Program is an implementation of this approach, providing alumni with the opportunity to produce fiction films under the supervision of lecturers and industry practitioners, while testing the feasibility of the workflow taught in class in actual production situations. The Perfect Family Dream, directed by Bagas Satrio, an alumnus of the Yogyakarta Film Academy, was chosen as a case study in this research because the film was produced entirely within the incubator program, with the majority of the crew consisting of alumni of the Yogyakarta Film Academy's D3 Film and Television Production program.

Both classical and contemporary cinematography literature emphasizes that the visual success of a film is largely determined by the quality of the camera department's pre-production, from script interpretation, shot planning, lens selection, to coordination with other departments (Ahmed et al., 2022). Brown, for example, places planning as the foundation of cinematic aesthetics, while recent studies on digital cinematography workflow show a shift in emphasis from "fix it in post-production" to "finish it in pre-production" through more careful planning. In line with this, research in the field of film education shows that the involvement of students and alumni in structured pre-production stages can improve critical thinking, technical problem solving, and collaborative work. However, studies that specifically discuss the workflow of the camera department in film production in Indonesia are still relatively limited. Existing cinematography studies generally focus on analyzing the visual results of films, such as camera angles, camera movements, or composition, rather than the workflow of the camera department in the film production process, especially during pre-production. Similarly, research on narrative film pre-production often places the camera as only one sub-t of the overall production management, rather than the main focus of the study. This study aims to fill this gap by placing the pre-production camera workflow at the center of analysis in film production in the 2024 Yogyakarta Film Academy alumni incubator program.

This research positions the camera department not merely as technical operators, but as key actors in formulating the film's visual concept through a series of structured stages: creative pre-production meetings between the DOP and director, visual reference research, shot breakdown, shot list compilation, lens and camera planning, camera test/look test, equipment list compilation, blocking simulation, interdepartmental coordination, location recce, photoboard, lighting diagram, and floorplan for each shot. These stages are in line with the practices recommended by international cinematography pre-production guidelines, while also being adapted to the resource conditions and work culture in the Indonesian vocational environment (Widiawan, 2017). Thus, the research questions are: (1) How was the camera department workflow applied in the pre-production of the film *Mimpi Keluarga Sempurna* (The Perfect Family Dream) in the Yogyakarta Film Academy Alumni Incubator Program? (2) What factors supported and hindered the effectiveness of this workflow? and (3) What are the implications of applying this workflow for the development of vocational film education and independent production standards? The objectives of this research include compiling a detailed description of each stage of the workflow, critically analyzing the practices that take place, and formulating curricular and practical recommendations for vocational institutions and similar incubator programs.

Method

This research uses a qualitative approach with a single case study design that focuses on the production of the film *Mimpi Keluarga Sempurna* (The Perfect Family Dream) as a representation of the application of the camera department workflow in a vocational education environment. Case studies were chosen because they provide an opportunity to understand the technical processes and production departments in depth in film production. Yin (2018) explains that case studies are particularly suitable for examining complex phenomena such as film production processes, especially when the boundaries between the phenomenon and its content are not clear cut. This approach is relevant in vocational education because field practice is an integral part of the learning process (Schröder, 2019). Data collection was conducted through participatory observation, in which the researcher directly observed all pre-production activities of the camera department. Observations were made on a series of activities, including DOP-director meetings, visual reference research, script breakdowns, shot list preparation, camera and lens planning, camera tests/look tests, location recce, blocking simulations, and inter-departmental coordination meetings (Basu et al., 2022). Participatory observation allowed the researcher to understand work behavior, communication patterns, and technical decision-making in real situations, as described by (Creswell, 2018). All field findings were recorded in observation logs and reinforced with photographic documentation and copies of production documents.

Additional data was collected through in-depth interviews. Informants consisted of the DOP, director, first assistant camera, line producer, and representatives from the art and lighting departments. Interviews were conducted in a semi-structured manner to keep them focused while allowing informants to explain their experiences narratively. Semi-structured interviews are considered effective for exploring professional experiences in production practices (Jessica et al., 2022). In addition to interviews and observations, this study used document analysis as a secondary data source. The documents analyzed included the final script, breakdown sheet, shot list, camera equipment list, camera test notes, recce photos, final photoboard, floor plan, and lighting diagram. (Monk et al., 2023) states that documents can serve as important supporting evidence in qualitative research, especially to verify consistency between plans and practices. This analysis helps assess the extent to which the visual design formulated in the pre-production stage was realized in the technical practices carried out by the camera department.

Data analysis was conducted through thematic analysis. The first stage was open coding to identify initial categories from interview results, observation notes, and production documents. The second stage was axial coding, which grouped these categories into larger themes such as vision communication, camera department technical strategies, technical risk mitigation, and the function of pre-production documents in crew coordination. The third stage was selective coding, which involved piecing together the main themes into a complete picture of how the camera department's workflow was designed and implemented. This approach followed the analytical framework of Strauss and Corbin (1998) and Braun and Clarke (2006). To maintain data validity, the study applied source triangulation and method triangulation.

Source triangulation was conducted by comparing observational data with interviews and documents. Technical decisions made in meetings, such as the selection of specific lenses, were verified through camera test notes and the final shot list. Method triangulation was conducted by comparing findings from observations, interviews, and document analysis.

This step is necessary to increase the credibility of the research as suggested (Saganowski et al., 2023). This study also uses member checking, which is asking several key informants to review the researcher's initial interpretation to ensure accuracy and consistency with field experience (Creswell, 2018). Through a combination of direct observation, interviews, document analysis, thematic analysis, and verification through triangulation and member checking, this study provides a comprehensive picture of the implementation of the camera department's workflow in vocational film pre-production and its contribution to visual consistency and production work efficiency.

Findings

The workflow of the camera department in the production of the film *Mimpi Keluarga Sempurna* (The Perfect Family Dream) proved to be very decisive in terms of visual quality and production process efficiency. From the outset, the cinematographer worked with the director to unify the film's visual vision, especially regarding the theme of mother-child relationships and the domestic atmosphere that served as the main setting. This collaboration continued with visual reference research to ensure that the entire team shared the same perception of the colors, lighting, composition, and emotional nuances to be achieved (Chu & Niu, 2023).

The camera department then carried out a series of planned technical steps, starting from script breakdown, shot list preparation, lens and camera planning, to camera testing to ensure that the images were consistent with the visual concept. The recce or location survey process was used to adjust the shooting plan to the actual conditions of the space, including natural light, room size, and other technical constraints. The recce results influenced decisions about actor blocking, camera movement, and lighting requirements.

The shot list, floor plan, and lighting diagram are created as detailed guidelines for the entire crew. These documents help maintain visual continuity and minimize improvisation that could hinder the shooting process. A photoboard is compiled as a final visual map that combines location photos and shot plans so that the crew has a complete picture of the film's visual sequence before going into production.

All these stages demonstrate that a systematic camera workflow can align artistic goals with technical requirements. This process also serves as a highly effective vocational learning tool for Yogyakarta Film Academy alumni, as they are directly involved in real production practices that demand collaboration, careful planning, and problem-solving skills. This workflow ultimately not only improves film production quality but also has the potential to become a standard of work and learning model for film education institutions and independent productions.

Discussion

The camera department workflow in the pre-production of *Mimpi Keluarga Sempurna* shows how the classic cinematography concepts discussed by Blain Brown and Joseph V. Mascelli can be applied in courses and alumni incubator programs at the Yogyakarta Film Academy. Brown views cinematography as both an art and a technique of organizing light, lenses, composition, and camera movement to consistently translate the director's vision throughout the film, with the Director of Photography (DOP) as the "visual architect" who leads the process from pre production (John, 2021). In this production, the DOP's role as a

visual architect was evident from the early stages when he was intensely involved in creative meetings with the director to discuss the film's main themes mother-child relationships and urban family dynamics and how these themes should be realized through specific visual style choices. These meetings were not merely technical coordination sessions, but conceptual forums where the director formulated dramatic intentions, while the DOP responded with suggestions for cinematographic approaches related to color palette, camera movement rhythm, and the quality of lighting in domestic spaces, which form the dominant setting of the film.

In this film production, the cinematographer/DOP was Saka Guna Wijaya, who led the camera department alongside 1st Assistant Camera Pratama Muhammad R and 2nd Assistant Camera Yendra Mardiansyah. From the early stages, the cinematographer and director held creative meetings to formulate a visual style that represented the dynamics of the mother-child relationship, including color palette choices, camera movement tendencies, and ways to utilize domestic spaces as dramatic arenas. This stage aligns with Brown's view that a shared vision can only be achieved if the DOP is actively involved in conceptual discussions, rather than merely responding to needs on location.

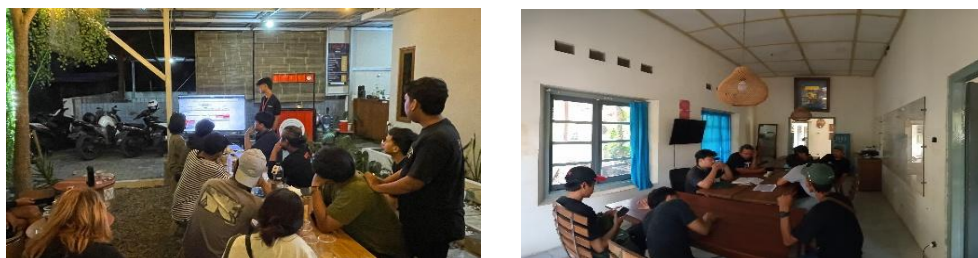


Figure. 1 Pre-production meeting between the director and the camera department crew camera department to formulate the film's visual style

The visual reference research stage then serves to realize ideas that are still in the conceptual design stage. Fachruddin places visual research through film stills, photography, and illustrations as an integral part of pre-production, as it helps the team agree on the visual world to be built before working out the technical details (Darmawan, 2002). Qurashi & Alsharif (2022) Also recommends that DOPs use visual references to bridge differences in perception between departments, especially when discussing things that are difficult to articulate with words alone, such as "warm but gloomy" or "intimate but oppressive." The following are visual references from the film *Mimpi Keluarga Sempurna*.



Figure 2. Visual references from the film *Mimpi Keluarga Sempurna*

In *Mimpi Keluarga Sempurna*, the DOP and director collected visual references that featured

rooms with soft natural lighting, compositions that emphasized the emotional distance between family members, and the use of relatively naturalistic colors. These references were then analyzed to determine which elements were relevant to the Yogyakarta location setting and production budget, and how these elements needed to be creatively constructed without changing the ideas or events in the story. The following are visual references from the film

The *recce* (location survey) stage plays a central role in creating the block shot plan, shot list, and visual design that has been compiled. *Recce* is carried out by visiting all the main locations with representatives from key departments: cinematographer, director, line producer, gaffer, key grip, as well as representatives from art and sound. Referring to narrative pre-production practices that place *recce* as a moment of verifying plans against spatial and technical realities, the team observes the orientation of natural light, room dimensions, wall colors, potential for distracting reflections, electrical resources, noise levels, and logistical access (Putro et al., 2022). The findings from the *recce* were then used to revise the shot list and block shots, for example, shifting the camera position to avoid narrow areas, changing the camera movement plan if the space did not allow it, or adjusting the shooting schedule based on the quality of sunlight at certain hours.



Figure 3. *Recce* for the film *Mimpi Keluarga Sempurna*

During the breakdown shot, block shot, and shot list compilation stages, the film's camera workflow closely follows the 5C framework of Cinematography formulated by Joseph V. Mascelli. In *The Five C's of Cinematography*, Mascelli (1965) outlines five principles camera angles, continuity, cutting, close-ups, and composition as practical foundations for cinematographers. He emphasizes that every camera angle, shot size, and composition must be consciously planned to ensure visual continuity and support the editing rhythm. The breakdown shot practice in *Mimpi Keluarga Sempurna* was carried out by dividing the film script into several shot units in each scene, taking into account the dramatic function of the scene, the emotional turning points of the characters, and the spatial relationships between the characters and the space. When to use a master shot to emphasize the spatial context, when to switch to a medium shot for interaction, and when to use a close-up as an emotional accent, all of these decisions were made in relation to the principles outlined by Mascelli regarding the function of shots in continuity and cutting (Sultanika, 2021).

The floor plan and shot list, created based on this breakdown process, serve as written guidelines for the implementation of filming on location. Each line of the shot list contains a brief description of the action, image size, camera angle, type of movement, and equipment notes, such as the need for a tripod, handheld, slider, or gimbal. In this way, the shot list not only helps with logistics, but also ensures consistency in the application of camera angles, close-ups, and composition so that continuity and cutting in the editing room can run smoothly. Narrative pre production research emphasizing the importance of shot

breakdowns and shot lists as the backbone of production efficiency affirms this practice: productions that are weak in shot planning tend to experience coverage and continuity gaps and difficulties in daily scheduling, while productions with well-developed shot lists have a safer margin for improvisation on location (Author, 2020; Author, 2022).

Lens and camera planning, as well as camera testing/look testing, are stages where Brown and Mascelli's cinematography theory is directly linked to the technical conditions of production (Devigus, 2024). emphasizes that the selection of lenses, recording formats, and image profiles are both aesthetic and practical decisions: wide lenses can reinforce the impression of characters being trapped in a space and open up room for camera movement in narrow locations, while long lenses can be used to isolate characters and build a sense of emotional distance. Decisions about depth of field, image stability, and the degree of camera movement also directly influence how the audience experiences space and the relationships between characters. In *Mimpi Keluarga Sempurna*, the DOP chose a set of lenses considering the limitations of the living space and the need to maintain emotional closeness with the main character. The digital camera used was chosen for its dynamic range and low light performance, which allowed the filmmakers to utilize interior lighting without having to rely on large lights that are difficult to manipulate in confined spaces.

Following Brown's recommendations and practical production guidelines such as those by (Simanjuntak, 2014), the planned camera lens lighting combination was tested in a camera test/test look before shooting began. This test was conducted not only to check technical aspects such as noise, highlight latitude, and shadow but also to evaluate how the combination produced visual nuances that matched the agreed-upon references and vision. The test look results are used to refine the exposure strategy, determine the safe ISO and aperture range, and select the LUT or gamma profile to be used on the monitors on set. Thus, many potential problems such as easily clipped highlights or overly dense shadows can be anticipated in pre-production, in line with the digital workflow trend that shifts the paradigm from "fix it in post" to "fix it in pre-production."

The next stage, compiling a camera equipment list and creating lighting diagrams, demonstrates the close integration between visual design, technical management, and cross-departmental coordination. (Edward& Pincus, 2012) emphasizes that the camera equipment list should be compiled as a direct derivative of the shot list and test results, and negotiated realistically with the production team to balance aesthetic needs and budget constraints. In this case, the DOP and 1st AC compiled a list that included primary and backup camera bodies, lens sets, stabilization systems, filters, monitors, storage media, and power solutions; this list was then consolidated with the line producer to ensure that each item had a clear justification for visual necessity. This process itself is an important vocational training for alumni: they learn that every equipment preference has concrete implications for time, labor, and cost.

The creation of lighting diagrams is another specific element that reinforces the professionalism of the camera workflow. positions lighting as the primary tool for shaping space, texture, and emotion, emphasizing that effective lighting schemes are born from planning, not full improvisation on set. The lighting diagram compiled by the camera team and lighting department depicts the floor plan (top view), actor positions, camera positions, and the positions and types of light units (key, fill, backlight) along with their quality and direction. For family room scenes, for example, the diagram maps the combination of natural light from windows with additional soft lighting to maintain a sense of realism while still

The final stage in the camera pre-production workflow is the creation of a photoboard, which serves as a visual consolidation of the entire plan. (Fahrudin et al., n.d.) both emphasize the importance of storyboards or visual planning as a tool for visualizing the sequence of shots, angles, and composition prior to production, so that the entire crew has a uniform understanding of the visual flow of the film. The Perfect Family Dream photoboard was (Warren et al., 2021) compiled by combining location photos, reference stills, and key shot descriptions from the shot list, then arranged according to the scene structure in the script. This document was used in pre-shooting meetings with the assistant director and other department heads as a visual map explaining shot priorities, transitions between scenes, and key moments that required special attention.



Figure 5. Photoboard for shooting during production

From a vocational education perspective, the involvement of alumni in the entire workflow creative meetings, visual research, breakdowns, shot lists, lens and camera planning, camera tests, equipment lists, lighting diagrams, blocking simulations, recce, and photoboards demonstrates the concrete implementation of the project-based learning principles recommended by film education and vocational education studies. The Film Education Journal emphasizes that effective film production learning must integrate theory with practice in real projects, while and colleagues assert that assessments should include workflow quality as one of the main indicators of professional competence (Liao et al., 2023). Research by Luthfillah and colleagues at vocational high schools also shows that a work structure that follows the professional production flow rather than just fragmented tasks significantly improves students' technical skills and work attitudes. In this framework, the workflow of the camera department at Mimpi Keluarga Sempurna can be seen not only as an efficient film production camera department, but also as a hidden curriculum that instills the way of thinking and working of a professional cinematographer in the alumni of the Yogyakarta Film Academy.

Conclusion

This study shows that the application of a structured camera department workflow in the pre-production of Mimpi Keluarga Sempurna contributes significantly to achieving visual coherence and work efficiency in the context of the Yogyakarta Film Academy Alumni Incubator Program. Referring to the understanding of cinematography as a planned process described by Brown and Mascelli, the workflow, which includes creative meetings between the DOP and director, visual reference research, shot breakdown, shot list compilation, lens and camera planning, camera tests, equipment list compilation, lighting diagram creation, blocking simulations, location recce, and photoboards proved capable of consistently aligning the narrative vision with technical strategies. This workflow reduced the need for extreme improvisation on location, minimized the risk of insufficient coverage, and helped maintain continuity in composition, lighting, and camera movement rhythm throughout the film.

From a vocational education perspective, this case study confirms that the camera department workflow can serve as an effective pedagogical framework for developing graduates' professional competencies. The direct involvement of alumni in the entire camera pre-production cycle from concept to visual planning is in line with the principles of project-based learning and process-based assessment recommended by film education and vocational research, where success is measured not only by the final product, but also by



the quality of planning, communication, and work documentation. Workflow documentation such as shot lists, lighting diagrams, and photoboards have been proven to not only guide production but also serve as post-production reflection artifacts that allow the team to evaluate the success and limitations of the visual decisions that have been made.

Conceptually, these findings enrich the literature on cinematography and film production by shifting the focus from the analysis of visual texts alone to an understanding of the camera department's work process as an important locus for the formation of aesthetics and professionalism. Practically, the research results recommend that film education institutions and incubator programs make documented camera workflows an explicit component of their curriculum and production operational standards, including the obligation to compile shot lists, lighting diagrams, and photoboards for each project. The implementation of these recommendations is expected to not only improve visual quality and production efficiency in vocational settings, but also strengthen graduates' readiness to adapt to the demands of cinematography workflows in the contemporary film and screen content industry.

References

- Ahmed, D., Muqdad, B. A., & Toklubok, P. (2022). The Employment of the Technique of Cinematography in Modern Poetry: (The Three Rivers) (Saadi Yusuf Case Study). *Human and Social Sciences*, 49(5), 252–262.
- Basu, R., Paul, J., & Singh, K. (2022). Visual merchandising and store atmospherics : An integrated review and future research directions. *Journal of Business Research*, 151(June 2021), 397–408. <https://doi.org/10.1016/j.jbusres.2022.07.019>
- Chu, G., & Niu, H. (2023). Knowledge mapping and global trends in the field of low-intensity pulsed ultrasound and endocrine and metabolic diseases : a bibliometric and visual analysis from 2012 to 2022. *Frontiers in Endocrinology*, September, 1–13. <https://doi.org/10.3389/fendo.2023.1237864>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches (5th ed.)*. Thousand Oaks, United States: SAGE Publications Inc.
- Creswell, J. W. (2018). *Penelitian Kualitatif & Desain Riset: Memilih Di Antara Lima Pendekatan*. Pustaka Belajar.
- Darmawan, A. J. (2002). Visual Design Face Painting: Language Expressions Stylized For Wayang Punakawan. *Humaniora*, 8(1), 57–67.
- Davini, P. (2020). From CMIP3 to CMIP6 : Northern Hemisphere Atmospheric Blocking Simulation in Present and Future Climate. *JOURNAL OF CLIMATE*, 33, 10021–10038. <https://doi.org/10.1175/JCLI-D-19-0862.1>
- Devigus, A. (2024). Photography or videography? A paradigm shift in dental clinical documentation. *The Journal of Prosthetic Dentistry*, 131(2), 175–176. <https://doi.org/10.1016/j.prosdent.2023.11.020>
- Edward Pincus, S. A. (2012). *The Film-Maker's Hand-Book A Comprehensive Guide For The Digital Age*. London WC2R 0RL, England.
- Fahrudin, I., Herdianto, A., & Kaulika, S. M. (n.d.). Implementasi Nilai-Nilai Jihad dalam Kepemimpinan Pendidikan. *Core.Ac.Uk*. <https://core.ac.uk/download/pdf/327121153.pdf>
- Fontana, L. (2023). Results in Engineering Effect of indoor surfaces ' spectral reflectance on the environmental light spectrum modification and on objects perceived color. *Results in Engineering*, 17(November 2022), 100805. <https://doi.org/10.1016/j.rineng.2022.100805>

- Jessica, A., Stephen, B., Barber, P., Bartholomew, C., Morrissey, D., & David, S. (2022). Musculoskeletal Science and Practice Clinicians ' experience of the diagnosis and management of patellofemoral pain : A qualitative exploration. *Musculoskeletal Science and Practice*, 58(January), 102530.
<https://doi.org/10.1016/j.msksp.2022.102530>
- John, J. (2021). The liminal role of the screenplay: Pre-production, the screen idea and the visual concept. *TEXT SPECIAL ISSUES*, 62, 1–10.
- Liao, C., Yao, K., Tsai, C., Xu, J., Huang, W., & Ho, W. (2023). Constructing and Validating Professional Competence Indicators for Underwater Welding Technicians for Offshore Wind Power Generation in Taiwan. *Sustainability*, 15(10801), 1–25.
- Monk, C., Sole, G., & Perry, M. (2023). Musculoskeletal Science and Practice Physiotherapists ' attitudes and beliefs about self-management as part of their management for low back pain. *Musculoskeletal Science and Practice*, 64(November 2022), 102727.
<https://doi.org/10.1016/j.msksp.2023.102727>
- Putro, W. P., Alhazami, L., & Shanti, L. (2022). Strategi pemasaran sepeda pacific di toko l makmur. *Jurnal Bisnisan: Riset Bisnis Dan Manajemen*, 3(3), 40–50.
- Qurashi, A. A., & Alsharif, W. M. (2022). Saudi Radiologists ' and Radiographers ' Perceptions of Accreditation Programmes in Clinical Radiology Departments : A Cross-Sectional Study Saudi Radiologists ' and Radiographers ' Perceptions of Accreditation Programmes in Clinical Radiology Departments. *Journal of Multidisciplinary Healthcare ISSN*., 2390, 401–411.
<https://doi.org/10.2147/JMDH.S350989>
- Saganowski, S., Perz, B., Polak, A. G., Kazienko, P., & Member, S. (2023). Emotion Recognition for Everyday Life Using Physiological Signals From Wearables : A Systematic Literature Review. *IEEE TRANSACTIONS ON AFFECTIVE COMPUTING*, 14(3), 1876–1897.
<https://doi.org/10.1109/TAFFC.2022.3176135>
- Schröder, T. (2019). A regional approach for the development of TVET systems in the light of the 4th industrial revolution : the regional association of vocational and technical education in Asia association of vocational and technical education in Asia. *International Journal of Training Research*, 17(1), 83–95.
<https://doi.org/10.1080/14480220.2019.1629728>
- Simanjuntak, R. R. (2014). Client's Point Of Views And Translators' Decision Making. *Humaniora*, 5(1), 185–191.
- Sultanika, S. (2021). Sinematografi film pendek yogyakarta. *DESKOVI: Art and Design Journal*, 4(1), 23–29.
- Warren, A., Buckingham, K., & Parsons, S. (2021). Everyday experiences of inclusion in Primary resourced provision: the voices of autistic pupils and their teachers ABSTRACT. *European Journal of Special Needs Education*, 36(5), 803–818.
<https://doi.org/10.1080/08856257.2020.1823166>
- Widiawan, B. (2017). Implementation of template matching method for door lock security system using raspberry pi. *VOLT: Jurnal Ilmiah Pendidikan Teknik Elektro*, 2(2), 143–148.