The Impact of Incorporating Styleframe in Motion Design: A Case Study on Animation Undergraduate Students

Auzani Zeda Mohamed Kassim*

Animation Programme, Faculty of Applied and Creative Arts,
Universiti Malaysia Sarawak,
Sarawak, Malaysia.
*Email: mkazeda@unimas.my

Abstract

Adapting industry practices into academic contexts has gained increasing relevance in Design education, particularly to enhance students' creative planning and execution of a project. This study investigates the application of styleframe as a main element in the creative development process in a Motion Design course. It consisted of undergraduate students in an animation program, where the students were tasked with a project-based learning to utilize styleframe as the project's primary visual tool for articulating their concepts and guiding the project's production. The research employs a case study approach, combining an in-depth analysis of a selected student project with a survey of 15 students, which included open-ended responses, to evaluate their application of styleframe. The results show that implementing styleframe fosters concept development and ensures consistent project execution from ideation to final production. It indicates that using styleframe supports the students' conceptual clarity and ensures coherent execution from ideation to final output among the production team. This study offers practical insights for educators seeking to align academic instruction with industry expectations and to enhance learning outcomes in Motion Design education.

Keywords: Styleframe; Motion design education; Creative processes; Animation

1. Introduction

Motion Design known as a multidisciplinary field that blends film, graphic design, and animation. Its evolution has transformed the visual tools and approaches used in the industry practices as well as in Design education. The advancement of software has enabled designers to explore new levels of creativity and technical innovations into their creative works. Thus enhances the creative process, technical skills and the outcome of a motion design project. Making motion designers in constant demand to create distinctive and visually appealing works. One of the important visual tools in motion design creation is the styleframe.

In a Medium blog post, Hawk (2017) stated, "a styleframe is a snapshot of a finished frame as it would look within a longer animation. It aims to capture the overall look and feel of an animated or live action video, but in a still image." It is a detailed visual representation of key scenes in a motion design sequence that plays a vital component to connect the motion design idea to its execution. See Fig. 1, an example of styleframe sequences from the Westworld TV series. Hamilton (2020) stated that in Motion Design, styleframe are used to communicate moments of the intended final output visually. In Design for Motion, Shaw (2015) describes a styleframe as a single image that captures the visual style of a motion design project. It

allows designers to envision and plan for their final design output. This process indicates that styleframe is crucial during the ideation phase in a motion design project. It is also important to guide the production workflow in maintaining coherence and consistency of a motion design output.

In the educational contexts, Styleframe serves as a valuable opportunity for the students to develop their creative problem-solving and technical proficiency. The execution of styleframe in their pre-production phase offers them a structured approach to see their concept look and feel before proceeding to the production phase, as well as guiding them from concept development to the realization of their ideas.

Figure 1: Styleframe from Westworld (2016), showcasing a minimalist visual tone that reflects the series' theme.

The objective of the study is to examine the effectiveness of the Styleframe application as a visual tool to support students' motion design projects. It investigates how incorporating styleframe helps the students develop visual conceptions, maintain the production team's visual style consistency throughout the project, and enhance their creativity in Motion Design. It seeks to understand further how integrating Styleframe into the animation workflow might enrich the students' learning experiences and improve production outcomes in their motion design projects.

2. Literature Review

The styleframe application is a crucial step in the Motion Design process, typically created after the idea development, moodboarding and storyboarding stages. Different from moodboards, which capture the overall visual tone and mood of a project (Omwami et al., 2024; McDonagh and Storer, 2004), styleframes are used to precisely depict key scenes in a motion design sequence, which help to establish the aesthetic, concept, and narrative of the final output. Syed (2017) states that the initial styleframe sets the visual direction of a project, which guides its overall aesthetic development. This process often begins with the

development of a storyboard and story beat to help define both the project's visual style and narrative flow.

Beyond establishing the direction, styleframe also communicates the intended final output of a motion design project, which serves as a creative blueprint for the production team and gives clients an early preview of the sequence's progression (Le, 2023). Weinberg (2016) emphasises that a styleframe usually reflects the essential elements, such as colour palette, tone, typography, and visual effects, to ensure that clients, art directors, and designers gain a clear view of the project. Once the clients or project director approve the storyboards of a motion design project, detailed animation work can begin. Similarly, approval of the styleframe indicates that the visual approach has been finalised and the project is ready for production. Further revisions and adjustments are often required before approval, which typically involve several iterations until a concrete visual direction is established.

Role of Styleframes in Motion Design Workflow
The development of styleframe involves designing key visual sequences that capture the project's aesthetic direction, usually produced in pre-production after the idea and storyboard stages. According to Shi et al. (2024), there are six key stages in the motion design creation workflow: narrative analysis, storyboarding, styleframe design, visual element creation, animation scene creation, and video compilation. At the styleframe creation phase, designers craft key scenes that define the tone and mood of the final concept (Shi et al., 2024). In this phase, elements such as colour, design concept, typography and visual arrangement are solidified within the styleframe. These act as reference points for both clients and designers to align on the project's visual direction before moving into production.

In Motion Design, styleframe guides the entire production by providing a complete vision of a project's concept and visual direction, including colour palettes, typography, and composition. de La Celle (2002) emphasizes its' dual function in motion design project: enable the clients to preview the intended output and its art direction before the production begins, and to ensure the production team works toward a cohesive vision. This process is essential for bridging the gap between the conceptualization of ideas and implementation, serving as a reference and guideline for design decisions and maintaining visual consistency throughout motion design production. While the role of styleframe is well established in industry practice, further empirical study is needed to evaluate its effectiveness as an educational tool in Motion Design. Moreover, little is known about how they contribute to enhancing students' creative skills within academic settings. This study addresses this gap by examining the adaptation of styleframe to support students' learning experiences and their advancement in visual storytelling in motion design projects.

3. Research Methodology

This study employed a mixed-methods approach to examine the influence of styleframe on Motion Design education among undergraduates. A detailed case study analysis was conducted on a selected student project that received high marks and demonstrated strong idea execution. The analysis focused on how it was integrated into the workflow for developing and executing the title sequence of the chosen film.

Additionally, a survey using a 5-point Likert scale, and an open-ended question was distributed to all 15 students in the course to capture their experiences and perceptions of using styleframe, with particular attention to their impact on creative problem-solving abilities and the technical challenges encountered. The mixed-methods approach provided a comprehensive understanding of the implications of incorporating styleframe into the curriculum.

Participants

The study was involved fifteen undergraduate students enrolled in the Motion Design course, a core component of the second-year Animation Program at the Faculty of Applied and Creative Arts, UNIMAS. All students in the course were included to ensure equal opportunity to engage with the curriculum and its objectives.

Setting

The Motion Design course emphasizes motion design narratives rather than non-conventional or character-driven narratives that students explored in previous semesters. It introduces students to broadcast design practices, such as creating TV ident and film title sequence, thereby exposing them to diverse animation applications and directions. Styleframe were integrated into the workflow as part of an iterative process, aligning with industry-standard practices. This approach trains students to develop well-defined visual concepts and narratives before beginning their animation production.

4. Results and Discussion

The study findings are based on an in-depth analysis of a selected student project. It involves creating a 40-second title sequence for the 2017 live-action remake of *Ghost in the Shell* directed by Rupert Sanders. The film was chosen as the project reference because of its iconic visual style and strong thematic elements to cyberpunk aesthetics, making it an ideal subject for concept design explorations and narrative through styleframe. In addition to evaluate the final product's overall quality and coherence, the analysis also examines how the use of styleframe influenced the students' technical and creative execution.

Figure 2:   Moodboard created by the student to define the visual tone and aesthetic direction for the *Ghost in the Shell* title sequence project.
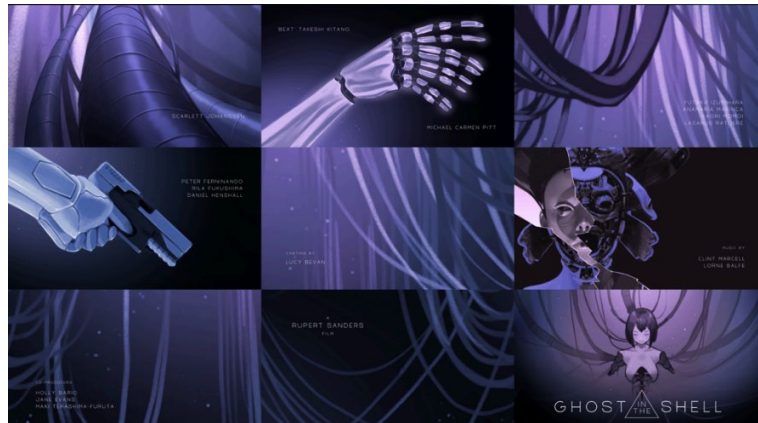
Figure 3:   Styleframe outcomes of the *Ghost in the Shell* title sequence concept, further developed from the moodboard and thumbnails.

Figure 4:   Final animated output in animation form of the student's *Ghost in the Shell* title sequence project, demonstrating strong alignment with the visual direction established in their styleframe.

The early ideas proposed in the moodboard (see Fig. 2) successfully developed into a vibrant and cohesive visual concept in the styleframe (see Fig. 3). The sequence retains the ambient and dark tone established in the styleframes, with fluid transitions and animations that effectively convey the mechanical and organic design elements. The students' consistent use of color, lighting and visual elements demonstrates their ability to maintain visual coherence from styleframe to final execution. It also highlights their technical range in achieving the complexity of the animation's movement envisioned during the styleframe phase.

As seen in Fig. 4, the completed sequence reflects the students' thorough understanding of the *Ghost in the Shell* concept and successfully turned into a well-crafted Motion Design title sequence for the film. It showcases the technical proficiency needed to produce a polished outcome. While maintaining the original concept, the project demonstrates the students' ability to translate conceptual designs into a fully realized motion design sequence. Furthermore, their application of sophisticated techniques, particularly in texture enhancement and dynamic lighting effects, has greatly elevated the visual quality of the final execution. In addition to preserve the intended visual narrative proposed in the styleframes, the students successfully carried these concepts into the production and post-production

phases, which added depth and realism to the storytelling. The results highlight their strong creative direction and technical expertise in using the software to realize their ideas.

Students Response on Utilizing Styleframes

A questionnaire and an open-ended survey were administered to students enrolled in the Motion Design course to investigate their perceptions of using styleframe in their final project. The questionnaire consisted of seven questions: six employing a five-point Likert scale and one open-ended question. (See Table 1).

1. Creating styleframes helped develop my idea for the film title sequence.
2. Using styleframes made my visual ideas clearer.
3. Using styleframes made me think more creatively to solve problems.
4. Styleframes helped me keep my design consistent from start to finish.
5. Using styleframes directly improved the overall quality of my final project.
6. Using styleframes made it easier to communicate my design ideas to peers and the instructor.

Table 1: Results on students response on utlizing styleframe

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Creating styleframes was helpful in developing my idea for the film title sequence	0%	0%	6.7%	**60%**	33.3%
2. Using styleframes made my visual ideas clearer.	0%	0%	6.7%	**66.7%**	26.7%
3. Using styleframes made me think more creatively to solve problems.	0%	0%	20%	**53.3%**	26.7%
4. Styleframes helped me keep my design consistent from start to finish.	0%	0%	0%	33.3%	**66.7%**
5. Using styleframes directly improved the overall quality of my final project.	0%	0%	0%	**53.3%**	46.7%
6. The use of styleframes made it easier to communicate my design ideas to peers and instructor.	0%	0%	0%	**53.3%**	46.7%

The findings show most students (93.3%) considered styleframe useful in developing their ideas, with 60% of students agreeing and 33.3% strongly agreeing with the statement, "Creating styleframes was helpful in developing my idea for the film title sequence." The data presented suggests that styleframe is a valuable tool for generating ideas in the early stages of motion design creation. Its ability to help students translate abstract concepts into visual representation show that the application of styleframe in the classroom fosters stronger concept development. Furthermore, the styleframe provides a preliminary depiction of the anticipated output and assists students in visualizing key narrative scenes.

Most students agreed with the statement, "Using styleframes made my visual thoughts clearer," indicating that the styleframe aided in clarifying their visual concept. The results highlight the importance of visual clarity, particularly in group projects, as it facilitates effective collaboration among team members. It aligns with the statement, "The usage of styleframes made it easier to explain my design ideas to classmates and instructors", on which

all students agreed, with 46.7% strongly agreeing. Overall, the feedback suggests that incorporating styleframe into a motion design project enhances the clarity of visual concepts. Integrating styleframes into the production pipeline is also a valuable tool for communicating ideas to others, mainly the clients. It ensures that everyone involved, whether aesthetically or technically, understands the project's direction.

The findings for the statement "Using styleframes made me think more creatively to tackle difficulties" show that more than half of the students (53.3%) agreed, with 26.7% strongly agreeing. This indicates that styleframe also function as a catalyst for creative problem-solving apart from a valuable tool for visual guide. Styleframe proves to be more than just a visual aid tool in creative production. It encourages the development of students' problem-solving capability throughout the animation process. Its application is useful not only for aesthetic purposes but also as a technical planning blueprint, helping students recognize and resolve potential technical issues during the production phase.

A total of 66.7% of the students strongly agree with the statement "Styleframe helped me keep my design consistent from start to finish". The findings suggest that styleframe is an essential component in helping students maintain design consistency throughout their motion design projects. The data highlights the importance of styleframe in the motion design process where it helps students to ensure that their final output closely matches their proposed vision and reduce production inconsistencies. In client projects, this consistency is crucial, as it brings the proposed vision to life in the finished product.

The results for the statement "Using the style frame directly improved the overall quality of my final assignment" show that nearly half of the students (46.7%) strongly agreed, while all students agreed that the styleframe improved the overall quality of their work. The finding suggests that the application of styleframe significantly enhanced the quality of their final product. It helps the students to produce a more polished and professional motion design piece while providing a clear visual guideline.

Table 2: Open ended responses on the most useful part of using styleframe.

Visual Flow and Consistency	"helps in ensuring consistency of visual and its flow." "to visualise the mood and colour of the project early on of the project, which provides us a clear path and guidelines we are going to go for. it provides consistency too so we dont go too out of the theme we want."
Color and Composition	"help me to choose what is the color grading im gonnas use and the composition of the title." "Color matching and Composition." "To know the visual art style included the color concept-what we want to show the audience."
Visualization of Final Outcome	"For visualising the final outcome of title sequence to focus on the elements." "Gives general idea how the final product will look like or end up look like. Helps alot during in the long run process." "It's like a blueprint for me to refer back and back again."
Guiding Ideation	"to be able to think creativeness and ideas for intro, climax, and the end."

From the visual flow and consistency, the report suggests that styleframe improved their project execution primarily by maintaining consistency throughout the entire process. It served as a visual guide to ensure that the final output aligned with the original concept and proposed visual direction. Styleframe supported all stages of production, from pre-production to post-production, by allowing students to refer to their initial design goals continually. Moreover, they helped the production team stay focused on the creative

direction, which is often difficult to maintain while striving for high-quality standards and a unified design execution.

From the color and composition, Styleframe supported students in making informed decisions about the composition and colour scheme of their title sequences. These elements were crucial in establishing the intended visual identity and overall aesthetic of the project before the commencement of the animation process.

From the visualization of final outcome, one suggests that students use styleframe to visualize the overall outcome of their projects, encompassing both aesthetic and technical aspects. This planning process enabled them to achieve a mutual understanding of the desired outcome while meeting the criteria set during the ideation phase. As a result, it supported consensus on the project's creative direction.

From the Guiding ideation, one implies that students utilize styleframes to strengthen their creative problem-solving skills and as a source of inspiration. The process of working with styleframe facilitated the development of concepts and ideas across various aspects of their projects, including shaping the narrative arc from the beginning through the climax to the resolution of the final output.

Overall, the findings highlight several important points for educators, students, and industry practitioners. First, styleframe as a structured component of learning process where students can strengthen their ability to conceptualise ideas, refine technical planning, and use it as a tool for effective team communication. Its practice also can enhance students' professional readiness, as it mirrors real-world workflows. For the industry, the findings suggest that emphasising styleframe in creative processes can lead to stronger collaboration and more consistent project outcomes. Finally, the study highlights the significance of employing styleframe as both a pedagogical tool and a professional standard, rather than merely a preliminary step.

5. Conclusions

In conclusion, the student survey data underscores the importance of incorporating styleframe in the motion design process to achieve polished and tangible results. Students consistently identified styleframe as valuable for both the technical and aesthetic aspects of their projects, particularly in idea conceptualization, problem-solving, technical planning, and effective communication of ideas. The evidence from survey responses and case study analyses suggests that the styleframe application is essential for maintaining consistency and supporting the iterative process. Overall, this contributes to elevating the standard of students' final outputs. The findings align with Ash Thorp's perspective, who describes the styleframe as the "Golden Frame", a guiding visual tool that establishes clarity and informs creative decisions (Cone, 2015). Additionally, the case study showed how styleframe supported the student from concept to execution, resulting in a unified and visually appealing product. The effective conversion from static styleframe into dynamic sequences demonstrated the critical role of styleframe in bridging the gap between technical execution and creative vision. Interestingly, its application is essential to both elements, the technical and artistic aspect of motion design. Thus, incorporating styleframe into motion design curricula is crucial for the development of innovative and skillful designers who can contribute significant value to both academia and industry.

Acknowledgement

References

Cone, J. (2015). Ash Thorp remixes Adobe in this psychedelic journey through the creative process. Motionographer. https://motionographer.com/2015/10/19/ash-thorp-remixes-adobe-in-this-psychedelic-journey-through-the-creative-process/

Hamilton, D. (2020). An exploration of procedural methods for motion design. East Tennessee State University Digital Commons. https://dc.etsu.edu/honors/522/

Hawk, L. (2017). Create style frames in Photoshop. Creative Bloq. https://www.creativebloq.com/how-to/create-style-frames-in-photoshop

de La Celle, A. (2022). The power of styleframes. Medium. https://medium.com/@adrien.delacelle/the-power-of-styleframes-d1b0ed1c8790

Le, C. (2023). 5 questions to consider when creating styleframes. Motionographer. https://motionographer.com/2023/06/15/5-storytelling-questions-to-consider-when-creating-styleframes/

McDonagh, D., & Storer, I. (2004). Mood boards as a design catalyst and resource: Researching an under-researched area. *The Design Journal*, *7*(3), 16–31. https://doi.org/10.2752/146069204789338424

Omwami, A., Lahti, H., & Seitamaa-Hakkarainen, P. (2024). Creating inspiration by developing digital mood boards in student teams. *Techne Serien – Forskning i Slöjdpedagogik och Slöjdvetenskap*, *31*(1), 65–81. https://doi.org/10.7577/TechneA.5361

Perkins, W. (2016). Westworld (2016). Art of the Title. https://www.artofthetitle.com/title/westworld/

Shaw, A. (2015). *Design for motion: Fundamentals and techniques of motion design*. Routledge. https://doi.org/10.4324/9781315731106

Shi, X., Wang, Y., Wang, Y., & Zhao, J. (2024). *Piet: Facilitating color authoring for motion graphics video*. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (pp. 1–17). ACM. https://doi.org/10.1145/3613904.3642711

Syed, A. (2017). Sohni Mahiwal: Preserving South Asian cultural heritage through animated storytelling. RIT Scholar Works. https://repository.rit.edu/theses/9625/

Weinberg, E. (2016). What is a styleframe? [Video]. Vimeo/Cut&Paste. https://fitc.ca/article/what-is-a-styleframe/