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Understanding Market-Oriented Fashion Concept and Visual Board Practices in Vocational Students

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ABSTRACT
This study aims to analyze the level of understanding among 12th-grade students in the Fashion Design vocational program regarding design concepts and their ability to create visual boards, including moodboards, styleboards, and marketboards. A quantitative descriptive method was employed using a questionnaire consisting of 16 statements, distributed to 85 students. The instrument focused on five key competencies: awareness of the importance of design research, the ability to gather references and analyze trends, idea development, technical skills in board creation, and the utilization of boards for presentations and portfolios. The results indicate that students' understanding falls within the moderate to high category. The highest average scores were found in research awareness and concept development (3.16), while the lowest appeared in the use and presentation of visual boards (3.02). Students demonstrated adequate understanding of design research and visual ideation but showed limitations in technical aspects of creating styleboards and in strategic visual communication. These findings suggest the need for more integrative, project-based learning and structured presentation practices. In particular, this study emphasizes students' understanding of marketboard construction as a reflection of their ability to identify target markets and apply trend forecasting in the conceptualization phase.

Keywords:
fashion design, visual board, design conceptualization, target market, trend forecasting

INTRODUCTION

Vocational education at the secondary school level, particularly in Fashion Design programs at vocational high schools (SMK), plays a crucial role in preparing graduates who are not only technically skilled but also capable of conceptual and strategic thinking. One of the key competencies that needs to be developed is students' ability to create well-structured design concepts and present them through visual media such as mood boards, style boards, and market boards. These boards serve not merely as presentation tools, but also as visual communication strategies that reflect aesthetic direction, brand identity, and target market segmentation (De Wet, 2017; Endrissat, Islam, & Noppeney, 2016; Ji & Lin, 2022). The ability to develop a solid design concept is increasingly important in the ever-changing fashion industry, which is heavily influenced by trends and consumer preferences. In this context, design research plays a central role as the foundation for informed and contextual creative decisions. According to Payne (2021) and Dong and Chen (2023), research-based design is more likely to align with developments in culture, technology, and user emotional needs. This process involves trend exploration (trend forecasting), cultural observation, and an understanding of social values encouraging students to rely not only on intuition but also on data and structured analysis.

Trend forecasting, as a key form of research in design, has been recognized as essential in the creative process due to its ability to anticipate changes in fashion direction and consumer behavior (Kim, Fiore, & Kim, 2013; Saidan, Yousuf, & Syed, 2022; Lopes, 2019). This approach helps students understand that design is not

merely a form of personal expression, but a thoughtful response to the social and psychological context of the target audience. In line with this, Causal Layered Analysis also offers meaningful insights into the cultural symbols and deeper values that influence human behavior (Zhuang, Liu, & Chen, 2024). However, in practical classroom settings, mood boards, style boards, and market boards are often misunderstood as decorative assignments rather than systematic thinking tools. Despite the strategic role of trend forecasting and target market analysis in fashion design, many students still perceive these processes as secondary to aesthetic considerations. As a result, the creation of marketboards which should communicate buyer personas, lifestyle alignment, and pricing strategies is often underdeveloped. This misconception is partly due to the dominant teaching focus on sewing skills and final product creation, while the conceptual phases such as research and idea mapping are frequently overlooked. In reality, the ability to develop well-structured and meaningful visual boards forms a strong foundation for producing innovative and market-relevant fashion designs (Lamb & Kallal, 1992; Munk, Sønderskov, & Laursen, 2020).

Previous studies have shown that vocational students often struggle to transform their research into clear and communicative visual outputs. Shi and Chen (2023) observed that limited exposure to visual and conceptual development hinders students' ability to express ideas strategically. Similarly, Safitri (2017) found that fashion design students in vocational schools tend to have low abilities in interpreting fashion trends, which negatively impacts their idea development and research-based portfolio building. Furthermore, in today's digital era, visual boards have become essential in design competitions, applications for higher education, and job recruitment processes, many of which are conducted online. Thus, the ability to develop professional and compelling visual boards provides students with a significant competitive advantage. These boards not only communicate design aesthetics but also demonstrate understanding of market segmentation, brand positioning, and visual storytelling strategies (Vazquez, Cheung, Nguyen, Dennis, & Kent, 2020; Zheng & Li, 2018).

Within the context of vocational education, the Indonesian Ministry of Education and Culture through the Directorate General of Vocational Education (2022) has encouraged curriculum strengthening aligned with industry needs. This includes implementing project-based learning, enhancing soft skills, and integrating digital branding capabilities. Hidayati (2021) also emphasized that combining conceptual and visual aspects in portfolio development can improve students' job readiness in the fashion sector. Based on this background, the objectives of this study are to: (1) analyze the level of understanding of 12th-grade vocational students in conducting research-based fashion design concepts; (2) assess their technical skills in creating mood boards, style boards, and market boards; and (3) identify their strengths and weaknesses in conceptual and visual learning processes. This study is expected to serve as a reference in developing instructional strategies that are not only technical but also strategic, reflective, and responsive to the evolving creative industries.

METHOD

This study employed a quantitative descriptive design to evaluate students' understanding of fashion design concepts and their ability to construct visual presentation media such as moodboards, styleboards, and marketboards. The study did not aim to test hypotheses but rather to provide a general overview of final-year students' knowledge. A non-experimental survey method was used to identify learning trends, as well as areas of strength and weakness in both conceptual and practical skills.

Data were collected through a structured questionnaire consisting of 16 items, distributed online via Google Forms to 85 12th-grade students in the Fashion Design program at a public vocational high school (SMK) in Jakarta. Respondents were selected using purposive sampling, limited to students majoring in fashion design. The questionnaire measured five key competency areas: (1) awareness and understanding of design research, (2) reference gathering and trend analysis, (3) idea and concept development, (4) visual board construction skills, and (5) board presentation and application. Each item was rated using a Likert scale.

The data were analyzed descriptively using basic statistical techniques such as mean scores and frequency distributions. Each competency area was categorized as high, moderate, or low based on the average scores. Inferential statistical tests were not applied, as the primary objective of the study was to provide instructional feedback rather than to determine causality or make predictions.

RESULTS AND DISCUSSION

This study involved 85 twelfth-grade students from the Fashion Design vocational program at a public vocational high school (SMK) in Jakarta, who participated in a thematic workshop on developing fashion design concepts and visual boards (moodboards, styleboards, and marketboards). A 4-point Likert scale questionnaire was used to explore students' understanding of various key aspects of the design process, ranging from research to visual presentation. The data were analyzed using descriptive quantitative methods by calculating the average score for each statement item.

Overall, the average scores across all items ranged from 2.93 to 3.28, indicating that most students demonstrated a moderate to high level of understanding, with certain areas emerging as strengths while others still required improvement.

Analysis by Competency Focus

1. Awareness & Understanding of Fashion Concept Research

Table 1. Competency A

No	Statement	Type	1	2	3	4	Mean
1	I understand the importance of conducting research before designing	F	10	4	28	43	3.22
		%	11.76	4.71	32.94	50.59	
2	I know the stages of fashion concept research	F	6	13	36	29	3.05
		%	7.14	15.48	42.86	34.52	
3	I believe research helps create a more focused design	F	7	8	31	39	3.20
		%	8.24	9.41	36.47	45.88	

The results show a strong awareness among students about the importance of research in the fashion design process. For the statement "I understand the importance of conducting research before designing," 83.53% agreed or strongly agreed, with the highest mean score in this category (3.22). This indicates a solid theoretical foundation that positions research as an essential step in concept development. However, when it comes to more technical understanding such as knowing the stages of conducting fashion concept research the average score dropped to 3.05. Although students value the idea of research, many are still unfamiliar with how to carry it out, such as identifying trends, gathering cultural data, conducting visual studies, or interpreting consumer insights.

Meanwhile, for "I believe research helps create a more focused design," 82.35% of students agreed or strongly agreed (mean = 3.20). This shows that students recognize how research contributes to clarity in design direction and concept storytelling. Still, 17.65% disagreed, indicating that not all students have had impactful research experiences that directly influenced their design work. In conclusion, students demonstrate good theoretical awareness of the role of research in design. However, their procedural knowledge is still developing. To improve this, classroom activities should incorporate direct research practices, such as mini-projects involving trend exploration, visual studies, and cultural analysis, enabling students to connect research theory with real-world application.

2. Reference Collection & Trend Analysis

Table 2. Competency B

No	Statement	Type	1	2	3	4	Mean
1	I can collect visual references from trends, culture, or the environment	F	2	9	37	37	3.28
		%	2.35	10.59	43.53	43.53	
2	I know how to use trend forecasting to guide my design	F	12	13	29	31	2.93
		%	14.12	15.29	34.12	36.47	
3	I regularly observe changing trends as design inspiration	F	5	8	38	34	3.19
		%	5.88	9.41	44.71	40.00	

Students showed strong performance in collecting visual references from trends, culture, and their surroundings. With 87.06% agreeing or strongly agreeing, and a high mean score of 3.28, it is evident that most students are visually sensitive and open to environmental influences as design inspiration. However, their ability to apply analytical tools like trend forecasting remains underdeveloped. Statement 4 scored the lowest in this cluster (2.93), with 25 students (29.41%) disagreeing or strongly disagreeing. This suggests that students may lack familiarity with industry-standard forecasting tools such as trend reports, macro trend maps, or digital platforms like WGSN.

Despite this, most students have already developed the habit of observing trends. With a score of 3.19 on Statement 8 and 84.71% agreement, students seem to intuitively follow trend developments, even if they don't yet analyze them systematically. This habit provides a strong base for future training in trend reading and strategic design thinking. Given that trend literacy is a core skill in the fashion industry, curriculum improvements are recommended such as workshops using professional forecasting tools, social media analysis, or fashion magazine reviews. These interventions can enhance students' ability to translate trend insights into design strategies aligned with future market demands.

3. Idea & Concept Development

Table 3. Competency C

No	Statement	Type	1	2	3	4	Mean
1	I am able to connect research findings with my design concept	F	5	12	41	27	3.06
		%	5.88	14.12	48.24	31.76	
2	I can create a concept map (mind map) to develop fashion ideas	F	5	11	32	36	3.18
		%	5.95	13.10	38.10	42.86	
3	I can select images, colors, and textures that suit my design ideas	F	6	9	29	41	3.24
		%	7.06	10.59	34.12	48.24	

Students demonstrate a fairly good ability to connect research findings with design concepts, with 80% agreeing or strongly agreeing, though only 31.76% strongly agreed (avg. score: 3.06). This indicates that while many understand the link between research and design, confidence in articulating that connection remains limited likely due to insufficient practice in design storytelling based on research insights. The statement “I can create a mind map to develop fashion ideas” received a higher average score of 3.18, with 80% agreement, suggesting that students are familiar with using visual tools like mind maps to structure ideas. However, only 42.35% strongly agreed, pointing to a need for more confidence in organizing complex design narratives.

Visual expression appears to be their strongest skill. On “I can select images, colors, and textures that align with my design ideas,” 82.35% agreed or strongly agreed (avg. score: 3.24), indicating comfort in visualizing aesthetics, though still lacking logical articulation of their visual choices. In conclusion, while students possess foundational skills in idea development and visual translation, they require further support in design storytelling explaining the rationale behind visual decisions using research. A project-based learning approach that integrates research, ideation, and storytelling may help strengthen this holistic design thinking process.

4. Visual Board Creation Competency

Table 4. Competency D

No	Statement	Type	1	2	3	4	Mean
1	I can create a moodboard based on the chosen theme	F	5	9	35	36	3.20
		%	5.88	10.59	41.18	42.35	
2	I understand the differences between moodboard, styleboard, marketboard	F	8	11	31	35	3.09
		%	9.41	12.94	36.47	41.18	
3	I can create a styleboard to show my design direction	F	10	12	37	26	2.93
		%	11.76	14.12	43.53	30.59	
4	I can create a marketboard based on my target market	F	5	12	40	27	3.06
		%	5.95	14.29	47.62	32.14	

Students showed the strongest skills in moodboard creation, with 83.53% agreeing or strongly agreeing and an average score of 3.20. This suggests they are familiar with arranging visuals like colors and textures to reflect design themes, likely due to frequent practice in class.However, their understanding of the distinctions among moodboard, styleboard, and marketboard remains limited (avg. score: 3.09). Only 41.18% strongly agreed, and 22.35% disagreed, indicating confusion over each

board's specific function.The ability to create a styleboard scored the lowest (avg. score: 2.93), with just 30.59% strongly agreeing. This suggests students struggle with translating design direction into consistent silhouettes, styles, and visual themes.

Although 78.82% agreed or strongly agreed they could create marketboards (avg. score: 3.06), few felt confident in matching consumer profiles with market visuals. Although a majority of students reported being able to create marketboards, further analysis shows that their outputs often lack clear articulation of target consumer profiles, lifestyle narratives, or purchasing behavior patterns. This indicates a superficial understanding of market alignment, where visual elements are selected for aesthetic appeal rather than strategic positioning. This is critical for strategic design communication. In summary, while students are relatively competent in basic visual board-making, especially moodboards they still need conceptual clarity and stronger skills in constructing styleboards and marketboards. Structured exercises focused on each board type and discussions on their visual communication functions are recommended to close these gaps.

5. Board presentation and application

Table 5: Competency E

No	Statement	Type	1	2	3	4	Mean
1	I feel confident presenting my visual board to teachers/others	F	10	7	39	29	3.02
		%	11.76	8.24	45.88	34.12	
2	I believe my board strengthens the message of my design idea	F	11	6	35	32	3.05
		%	13.10	7.14	41.67	38.10	
3	I can use visual boards for portfolios or competitions	F	11	9	36	29	2.98
		%	12.94	10.59	42.35	34.12	

Students' confidence in presenting their visual boards is relatively good, with 80% agreeing or strongly agreeing (avg. score: 3.02). However, 20% still lack confidence, possibly due to limited public speaking experience or fear of criticism. Activities such as presentation simulations or design pitching exercises could help improve this aspect. Regarding the board's communicative strength, 78.82% agreed or strongly agreed that their boards reinforce their design concepts (avg. score: 3.05). This suggests a growing awareness that visual boards serve as strategic communication tools, not just decorative displays. However, only 37.65% felt strongly confident, indicating a need for deeper understanding of visual hierarchy, storytelling, and design logic.

The lowest score in this section came from the statement on using boards for portfolios or competitions (avg. score: 2.98). Although 76.47% agreed or strongly agreed, only 34.12% felt highly confident. This highlights a gap in strategic thinking many students may not yet see their visual boards as tools for professional branding or career advancement. In conclusion, while students demonstrate basic technical ability and moderate confidence in using and presenting visual boards, they still require structured learning on how these boards function in real-world professional contexts. Integrating portfolio development and presentation simulations into class activities could bridge this gap and empower students to use boards more effectively for personal branding and design communication.

6. Summary of Average Scores by Competency Area

To help interpret the results more clearly, each average score was categorized into one of three levels: Low (1.00–2.49), Moderate (2.50–3.24), and High (3.25–4.00). These classifications represent the extent to which students demonstrate understanding and competency in each assessed area. Scores that fall within the Moderate–High range indicate that students have a relatively strong grasp of the concepts being measured. However, these scores also imply that there is still room for development, especially in aspects related to technical application and the strategic execution of design ideas.

Table 6: Competency Fokus

No	Competency Focus	Average Score	Category
1	A. Awareness & Understanding of Fashion Research	3.16	Moderate–High
2	C. Idea & Concept Development	3.16	Moderate–High
3	B. Reference Collection & Trend Analysis	3.13	Moderate–High
4	D. Visual Board Creation Competency	3.07	Moderate
5	E. Board presentation and application	3.02	Moderate

The highest score (3.16) was observed in students' awareness and understanding of the importance of research in fashion design. They recognize research as a critical foundation for developing design direction, though they still lack technical skills such as field observation and trend analysis. This highlights the need for more applied, case-based learning. An equal score was found in the area of idea and concept development, where students show ability in visual ideation through mind maps and aesthetic elements like color and texture. However, the connection between research findings and design decisions remains mostly intuitive. Strengthening critical and reflective thinking is needed to bridge this gap.

Reference gathering and trend analysis scored 3.13. Students actively seek inspiration from their surroundings and social media, but are unfamiliar with predictive forecasting methods. As a result, their designs tend to follow trends rather than analyze them. Training in professional trend analysis tools is necessary to build strategic, forward-thinking designers. Visual board creation averaged 3.07. Students feel confident in making moodboards but struggle with more technical boards like styleboards and marketboards. This indicates an imbalance between aesthetic strength and strategic depth, suggesting a need for contextual board-making practice that aligns ideas with execution.

The lowest score (3.02) appeared in the area of Board presentation and application. While students are confident in showing their work, many don't yet understand the role of visual boards in professional communication, portfolios, or competitions. This gap points to a lack of training in visual storytelling, idea pitching, and personal branding skills essential for creative industries. In summary, students are relatively strong in conceptual development but need improvement in technical execution and communication strategy. Addressing this imbalance requires an integrative, contextual learning model that enhances both creativity and industry readiness. With the right support, students have the potential to become strategic designers equipped for success in the digital creative era.

Discussion

The findings of this study underscore a complex yet promising landscape of conceptual and visual understanding among 12th-grade fashion vocational students. Students demonstrated strong theoretical awareness, particularly in recognizing the importance of research in the design process. With the highest mean score recorded in the “Awareness & Understanding of Fashion Research” category (3.16), students appeared to value research as a critical foundation for creative development. However, their procedural grasp such as the ability to apply trend forecasting tools or conduct field observation remained limited. This reflects a broader challenge in vocational education, where technical skills often take precedence over strategic thinking and analytical reasoning.

Moreover, the data revealed that students are visually responsive, with high scores in reference collection and aesthetic arrangement. Their ability to intuitively gather inspiration from environmental cues and visual media suggests a strong potential for creative ideation. Nevertheless, their familiarity with analytical frameworks for forecasting trends and aligning visuals with market segmentation is underdeveloped. This disconnect often results in visually rich but strategically weak design outcomes.

In terms of board creation, students showed relative competence in developing moodboards, likely because such boards emphasize emotion and visual harmony skills commonly nurtured in creative classrooms. Conversely, lower performance in styleboard and marketboard creation suggests a need for curriculum reinforcement that distinguishes each board’s function in the design process. Without this clarity, students may struggle to articulate their design narrative, style direction, and target consumer alignment. A deeper issue lies in the weak connection between visual board practices and marketing logic. For example, while students can visually arrange moodboards and styleboards, they often struggle to define who the design is for. The concept of target market central to marketboard creation requires students to analyze geographics, demographics, and psychographics that reflect their consumer choices. Without this connection, marketboards lose their communicative power as strategic tools.

Additionally, the lowest mean scores were observed in the competency area of board presentation and application (3.02). Although students demonstrated moderate confidence in presenting their work, many lacked a full understanding of how visual boards serve professional purposes such as portfolio development, competition readiness, and brand communication. These findings align with prior research (e.g., Shi & Chen, 2023; Safitri, 2017), which highlights the gap between vocational students’ technical execution and their strategic application of visual tools.

Thus, an integrative pedagogical approach is needed, onef that combines research-based design thinking, structured visual development, and reflective storytelling. Project-based learning, peer feedback, and simulation of industry practices such as pitching or competition submission could significantly enhance students’ readiness for the fashion sector’s demands.

The findings of this study offer practical implications for vocational educators, curriculum developers, and industry partners. For educators, the study highlights the importance of integrating research-based design thinking into daily instruction to enhance students’ strategic and conceptual skills. Curriculum developers can use the

competency-based findings to refine learning modules that address both aesthetic and analytical aspects of design. For the fashion industry, the study provides insight into the current preparedness of vocational graduates, helping align industry expectations with educational outcomes. By embedding trend analysis, storytelling, and portfolio development into classroom practices, schools can better prepare students to enter a highly competitive, innovation-driven job market.

CONCLUSION

This study concludes that while 12th-grade fashion vocational students possess a moderate to high understanding of design concepts and visual board creation, there remains a clear need for instructional refinement. The strongest competencies were found in students' theoretical awareness of design research and visual ideation skills, particularly in moodboard creation. However, technical application especially in using forecasting tools, differentiating visual board types, and presenting boards for strategic communication still requires improvement. Particular attention should be given to the development of marketboard skills that integrate target audience identification and trend responsiveness as essential components of fashion marketing education.

Students are creatively inclined and show promise in aesthetic expression, but their conceptual reasoning and strategic articulation remain underdeveloped. These gaps indicate that current instructional models may not sufficiently emphasize the integration between research, concept development, and real-world application.

To bridge this divide, vocational curricula should implement more contextual, project-based learning methods that reinforce trend analysis, storytelling through design, and portfolio development. Equipping students with both creative and strategic competencies will not only improve their academic performance but also prepare them to become competitive, industry-ready designers in an increasingly digital and fast-evolving fashion landscape.

This study has several limitations that should be acknowledged. First, the research was conducted at a single vocational high school in Jakarta, which may limit the generalizability of the findings to other regions or institutions with different curricula and teaching environments. Lastly, the study did not explore demographic variables such as gender, previous design experience, or digital literacy, which may influence students' understanding and visual communication skills.

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