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Review Article

Exploring the Need for Reform in Automobile Design Education Across Higher Education Institutions: Global Perspectives

Jiaqi He [a], Hasnul Azwan Azizan [a] and Chen Hong [a,*]

[a] School of Arts and Design, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia; 843437637@qq.com (J.H.), hasnul622@uitm.edu.my (H.A.A.)
* Correspondence: chenhong245068@gmail.com (C.H.)

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Abstract: This study explores the imperative for reforming automobile design education in higher education institutions, driven by rapid advancements in the automotive design industry. This study begins by examining the current landscape and emerging trends within the automotive design sector, highlighting the pressing need for educational reform. It then delineates the objectives and trajectory of the proposed teaching reforms, followed by a comprehensive presentation of the specific reform strategies. This research underscores the potential of these educational reforms to enhance students' practical skills and foster innovative thinking. By doing so, this study aims to provide valuable insights into the ongoing development and improvement of automobile design education. This paper's methodology involves a thorough analysis of the automotive design industry's current state and future directions, providing a contextual framework for the proposed educational reforms. This analysis serves as the foundation for identifying key areas that require modifications in the existing curriculum. The study then outlines a series of targeted reform measures, each designed to address specific gaps in the current educational model and to align it more closely with industry needs. A significant focus of this research is on the anticipated outcomes of these reforms, particularly in terms of student skill development. This paper argues that the proposed changes will lead to a marked improvement in students' practical abilities, enabling them to better meet the demands of the evolving automotive design industry. Additionally, these reforms are expected to cultivate students' innovative thinking capabilities, preparing them for the creative challenges inherent in modern automotive design. Ultimately, this study aims to serve as a valuable resource for educators, administrators, and policymakers involved in shaping the future of automobile design education. By providing a comprehensive overview of the need for reform coupled with actionable strategies for implementation, this study seeks to contribute to the ongoing evolution of automotive design education in response to industry advancements.

Keywords: Automobile design education; Higher education institutions; Global perspectives

1. Introduction

The automotive design industry, a shining gem within the modern industrial landscape, has increasingly demonstrated its crucial strategic significance (Esslinger, 2009; Hutton, 2000). Recent data indicate a steady rise in global automobile production, accompanied by a growing trend towards diverse and personalized consumer demands (Altshuler, 1984; Dakić et al., 2024; Lempp & Siegfried, 2022). The rapid advancements in new energy vehicles and

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intelligent driving technologies have particularly invigorated the automotive design sector, simultaneously imposing heightened standards on the industry (Jaffe, 2021; Loo, 2024; Papadimitriou & Duysinx, 2022). Despite this flourishing industry landscape, the conventional teaching methodologies for automotive design in higher education institutions are struggling to keep pace. Surveys reveal that numerous colleges and universities continue to emphasize theoretical knowledge in their automotive design curricula, neglecting the essential development of students' practical skills and innovative thinking. This educational shortfall results in many graduates facing difficulties in swiftly adapting to the industry's rapid evolution upon entering the workforce, and subsequently struggling to distinguish themselves in an intensely competitive market (Beech, 2018).

The reformation and exploration of automotive design education in tertiary institutions represents a complex, multifaceted endeavor. It necessitates a comprehensive approach to consistently enhance both the quality and standard of instruction. This process involves several key areas of focus and improvement. Firstly, there is a pressing need to update and align curricula with current industry trends and technologies. This includes incorporating modules on new energy vehicles, autonomous driving systems, and advanced manufacturing techniques. By doing so, students can gain exposure to cutting-edge concepts and practices that are shaping the future of automotive design. Secondly, educational institutions must prioritize the integration of practical, hands-on experiences into their programs. This could involve partnerships with industry leaders to provide internships, collaborative projects, or on-site training opportunities. Such initiatives would enable students to apply theoretical knowledge in real-world scenarios, fostering the development of crucial practical skills.

Thirdly, nurturing innovative thinking and creativity should be a cornerstone of automotive design education. This can be achieved through problem-based learning approaches, design thinking workshops, and interdisciplinary collaborations that challenge students to think beyond conventional boundaries. Furthermore, investing in state-of-the-art facilities and technologies is crucial. This includes 3D modeling software, virtual reality tools, and rapid prototyping equipment, which are integral to modern automotive design processes. Exposure to these technologies will better prepare students for the realities of the industry. Additionally, fostering stronger industry-academia connections is vital. Regular industry guest lectures, workshops, and collaborative research projects can provide students with invaluable insights into current market demands and future trends.

Lastly, promoting a global perspective in automotive design education is essential. This can be achieved through international exchange programs, virtual collaborations with overseas institutions, and studying global automotive markets and design philosophies through concerted efforts in these areas, it is possible to cultivate a new generation of automotive design professionals who are not only well-versed in theoretical knowledge but also equipped with practical skills, innovative thinking, and a global outlook. These graduates will be better positioned to adapt to the industry's rapid evolution, excel in competitive markets, and contribute significantly to the continued growth and innovation in the automotive design sector.

2. Goal and Direction of Automobile Design Teaching Reform

2.1. Combination of Theory and Practice to Improve Students' Practical Ability

In automotive design education, integrating theoretical knowledge with practical application is crucial for enhancing students' comprehensive abilities (Ravi et al., 2024; Schulze et al., 2014). The rapid evolution of the automotive industry has led to increased demands for automotive design professionals who possess not only a solid theoretical foundation but also extensive practical experience and innovative capabilities (Candelo, 2019; Nieuwenhuis & Wells, 2015; Wedeniwski, 2015). Consequently, the reform of automotive design education in higher learning institutions must prioritize the integration of theory and practice to enhance students' practical skills. To address this need, traditional teaching methodologies should be revised to incorporate a balanced approach between theoretical coursework and practical components. Conventional teaching methods often prioritize theoretical knowledge over practical application, resulting in limited opportunities for students to gain hands-on experience (Bhute et al., 2021; Ghimire, 2024; Haury & Rillero, 1994). To mitigate this issue, innovative teaching strategies such as project-based learning and case study analyses can be implemented, enabling students to acquire and apply theoretical knowledge while addressing real-world challenges. Furthermore, the utilization of modern information technology, including virtual simulation and 3D printing, can create a more immersive and intuitive learning environment, thereby fostering students' practical and innovative abilities.

Emphasis should be placed on strengthening practical education by providing students with increased opportunities and platforms for hands-on learning. This can be achieved through the establishment of practical teaching facilities and collaborative projects with industry partners, allowing students to gain in-depth understanding of automotive design processes and technical requirements. Additionally, organizing design competitions and innovative projects can stimulate students' creativity and innovative spirit while cultivating teamwork and communication skills. The integration of theory and practice has demonstrated significant improvements in students' practical abilities. Recent statistical data indicate that students majoring in automotive design who have experienced this reformed educational

approach generally outperform those educated under traditional methods. These students exhibit greater proficiency in applying their knowledge to solve practical problems and generate innovative design solutions. Moreover, the employment prospects for graduates of this reformed program have notably improved, with many companies expressing a preference for automotive design professionals possessing practical experience and innovative capabilities.

Furthermore, strengthening the integration of theory and practice contributes to the enhancement of students' overall competencies. Practical experiences not only require the application of professional knowledge but also necessitate effective communication skills, teamwork, and problem-solving abilities. The development of these skills is paramount for students' personal growth and future career advancement. Thus, reinforcing the integration of theory and practice remains a primary objective in the reform of automotive design education. Through the implementation of innovative teaching methodologies, strengthening practical components, and other strategic measures, students' practical abilities can be effectively enhanced. This approach will ultimately produce high-caliber automotive design professionals capable of meeting the evolving demands of the automotive industry.

2.2. Pay Attention to the Cultivation of Students' Innovative Thinking and Design Ability

In contemporary higher education, a primary objective and focus of automotive design curriculum reform is the cultivation of students' innovative thinking and design capabilities (Chien & Chu, 2018; Cobo, 2013; Gibbons, 1998). The rapid evolution of the automotive industry and intensifying market competition have led to an increased demand for automotive design professionals possessing innovative thinking and design skills. Consequently, higher education institutions must prioritize the development of these competencies in their automotive design programs to meet industry requirements. To foster innovative thinking, universities should implement diverse strategies (Chien & Chu, 2018). For instance, introducing interdisciplinary teaching approaches that integrate automotive design with fields such as mechanical engineering, electronics, and materials science can broaden students' knowledge base and stimulate innovative thinking. Additionally, organizing design competitions and innovative practical activities enables students to explore and innovate in real-world scenarios, enhancing their problem-solving abilities.

Strengthening design skills is equally crucial. Educational institutions should emphasize practical teaching and provide ample hands-on opportunities (Doerner & Horst, 2022; Maeko & Makgato, 2014; Schwichow et al., 2016). Establishing well-equipped practical teaching facilities with advanced tools allows students to master automotive design techniques through experiential learning. Collaborations with industry partners for internship programs can provide students with insights into corporate design processes and requirements, thereby enhancing the practicality and relevance of their design skills. To assess students' innovative thinking and design capabilities, universities should implement comprehensive evaluation systems. These may include course assignments, design projects, and graduation theses. Incorporating industry experts' evaluation standards can align assessments more closely with actual industry needs and standards.

Recent data indicates that automotive design teaching reforms focusing on cultivating innovative thinking and design skills have significantly improved students' overall competencies. For instance, following the implementation of such reforms in one university's automotive design program, students' design works have garnered numerous accolades in various competitions, and their innovative and design capabilities have been widely recognized by industry stakeholders. Furthermore, graduate employment rates have shown a year-on-year increase, with average salary levels exceeding industry norms. In conclusion, prioritizing the development of students' innovative thinking and design capabilities is a critical objective in automotive design education reform. Through the implementation of diverse measures, emphasis on practical teaching, and establishment of robust evaluation systems, educational institutions can effectively enhance students' innovative thinking and design skills, thereby producing high-quality professionals for the automotive industry.

2.3. Development Needs of the Automotive Industry to Optimize the Curriculum and Teaching Content

Project-based teaching in automobile design education is fundamentally rooted in the meticulous selection and crafting of projects that closely align with industry demands and trends, ensuring both practicality and forward-thinking approaches (Almakaty, 2024; Hutson & Rains, 2024; Sheninger & Murray, 2017). These projects should present moderate challenges, stimulating students' abilities without overwhelming them. The project design should emphasize the development of teamwork and communication skills, fostering both professional expertise and comprehensive competencies. In the implementation of project-based teaching, educators assume the role of guides and coordinators, providing clear objectives and requirements while directing students in research methodologies, problem analysis, and solution formulation. Continuous monitoring of project progress, timely feedback, and guidance are essential for smooth execution. Additionally, facilitating project exchanges and sharing sessions among students promotes mutual learning and collective progress.

The integration of project-based teaching enhances the synergy between theoretical knowledge and practical application, thereby improving students' practical skills and innovative thinking. This approach also cultivates teamwork and communication abilities, laying a solid foundation for future professional development. Consequently, in reforming automobile design education, it is imperative to actively promote and refine project-based teaching methodologies. It is important to note that implementing project-based teaching is an iterative process requiring continuous evaluation, strategy adjustment, and process optimization. Challenges such as project schedule management, uneven student participation, and resource constraints may arise. Addressing these issues necessitates an open-minded approach, willingness to experiment with novel teaching techniques, and the ability to learn from successful practices in academia and industry.

Moreover, project-based teaching should maintain a strong connection with the automotive industry. Given the dynamic nature of automobile design, with its rapid technological advancements and evolving concepts, project design must reflect current industry demands and future trends. Engaging industry experts in project guidance and evaluation can provide valuable insights into market trends and offer students practical exposure. The successful implementation of project-based teaching requires robust institutional support. Educational institutions can introduce policies that encourage and support faculty in adopting this teaching approach. Additionally, providing necessary resources such as well-equipped laboratories and practical training facilities is crucial for the effective execution of project-based learning.

3. Specific Measures of Automobile Design Teaching Reform

3.1. Project-Based Teaching to Improve Student Participation

The essence of project-based teaching in automobile design education lies in the careful selection and design of projects that align closely with industry demands and trends, ensuring both practicality and foresight (Al Mamun et al., 2020; Johnston, 2024; Sjöman, 2014). These projects should be moderately challenging, stimulating students' abilities without exceeding their capabilities. Furthermore, project design should emphasize the development of teamwork and communication skills, fostering both professional expertise and comprehensive competencies. In implementing project-based teaching, educators assume the role of guides and coordinators, providing clear objectives and requirements while directing students in research methodologies, problem analysis, and solution formulation. Continuous monitoring of project progress, timely feedback, and guidance are essential to ensure smooth execution. Additionally, facilitating project exchanges and sharing sessions among students promotes mutual learning and collective progress. The integration of project-based teaching enhances the synergy between theoretical knowledge and practical application, thereby improving students' practical skills and innovative thinking. This approach also cultivates teamwork and communication abilities, laying a solid foundation for future professional development. Consequently, in reforming automobile design education, it is imperative to actively promote and refine project-based teaching methodologies.

It is important to note that implementing project-based teaching is an iterative process requiring continuous evaluation, strategy adjustment, and process optimization. Challenges such as project schedule management, uneven student participation, and resource constraints may arise. Addressing these issues necessitates an open-minded approach, willingness to experiment with novel teaching techniques, and the ability to learn from successful practices in academia and industry. Moreover, project-based teaching should maintain a strong connection with the automotive industry. Given the dynamic nature of automobile design, with its rapid technological advancements and evolving concepts, project design must reflect current industry demands and future trends. Engaging industry experts in project guidance and evaluation can provide valuable insights into market trends and offer students practical exposure.The successful implementation of project-based teaching requires robust institutional support. Educational institutions can introduce policies that encourage and support faculty in adopting this teaching approach. Additionally, providing necessary resources such as well-equipped laboratories and practical training facilities is crucial for the effective execution of project-based learning initiatives in automobile design education.

3.2. Modern Information Technology to Enrich Teaching Methods

Modern information technology has revolutionized automobile design teaching by providing diverse and innovative methods (Collins & Halverson, 2018; Fichman et al., 2014; Lowgren & Stolterman, 2007). Traditional approaches, which relied heavily on textbooks and lectures, often failed to offer students hands-on experiences or intuitive understanding. The integration of multimedia teaching, online learning platforms, and virtual simulation technologies has significantly enhanced the vividness and interactivity of course content, thereby stimulating students' interest and enthusiasm for learning. For instance, multimedia teaching enables instructors to present three-dimensional models and animated demonstrations of automobile designs, facilitating a deeper comprehension of design principles and structural characteristics. Online learning platforms offer students the flexibility to access educational resources at their convenience, promoting autonomous learning and inquiry-based approaches (Al Mamun et al., 2020; Mamun, 2018; Onyema et al., 2019). Virtual simulation technologies allow students to engage in practical operations and experimental verifications within simulated design environments. Furthermore, modern information technology has fostered

interdisciplinary collaboration and communication in automobile design education. As a multidisciplinary field encompassing mechanical engineering, electronic engineering, and computer science, automobile design benefits from the enhanced connectivity provided by digital platforms. These technologies enable the formation of interdisciplinary teaching teams, joint development of educational resources, and collaborative project design. Students can also engage in cross-disciplinary communication and cooperation, broadening their perspectives and cultivating teamwork and innovation skills.

The abundance of teaching resources and case studies made available through the Internet and big data technologies has significantly enriched automobile design education. Instructors can access a wealth of design cases and technical documents to supplement their teaching materials, while students can explore additional learning resources to expand their knowledge and skills. This access to diverse and current information enhances the relevance and effectiveness of teaching while keeping students informed about industry trends and developments. The integration of modern information technology in automobile design education has also raised the bar for instructors' competencies. Teachers are now required to continuously improve their digital literacy and technical skills, mastering the application of various technologies in their teaching practices. Moreover, they must adapt their pedagogical approaches to leverage these technologies effectively, exploring innovative teaching models and strategies. This may include implementing personalized learning plans based on individual student needs or utilizing distance learning and counseling services to provide more accessible educational support.

While the application of modern information technology offers numerous benefits, it is crucial to address potential challenges. Care must be taken to ensure that technological integration aligns with the core objectives and requirements of automobile design education, avoiding misuse or overreliance on technology. Emphasis should be placed on student engagement and experiential learning, utilizing technology to enhance rather than replace traditional educational methods. Additionally, proper guidance and supervision are necessary to ensure students use these technologies effectively and responsibly in their learning process. The ongoing development of modern information technologies, particularly in areas such as artificial intelligence, big data, virtual reality, and augmented reality, promises to further transform automobile design education. These advancements are likely to enable more intelligent and personalized learning experiences, with improved capacity for practical training and experimental verification. As the field continues to evolve, it is essential for both educators and students to stay abreast of technological trends and develop the necessary skills to leverage these tools effectively in the pursuit of excellence in automobile design education.

3.3. Interdisciplinary Cooperation to Broaden Students' Horizons

Interdisciplinary collaboration is instrumental in expanding students' knowledge domains. Automotive design, being a highly comprehensive discipline, encompasses knowledge from mechanical engineering, electronic engineering, materials science, computer science, and other fields (Arroyave et al., 2018; Roy & Roy, 2021; Schweingruber et al., 2012). Traditional automotive design education often overemphasizes knowledge transfer within the discipline while neglecting cross-integration with other fields. However, in modern automotive design, interdisciplinarity has become an inevitable trend (Hassanzadeh, 2023; Law & Chan, 2023). Consequently, higher education reforms in automotive design should actively promote interdisciplinary collaboration and guide students to engage with and learn from related disciplines, thereby broadening their perspectives and enhancing their overall competence. Interdisciplinary cooperation fosters students' innovative thinking and problem-solving abilities. Automotive design is inherently an innovative process that requires designers to possess rich imagination and creativity. Through interdisciplinary collaboration, students are exposed to diverse research methodologies and thought processes, stimulating their innovative thinking. Furthermore, the exchange and collision of ideas between different disciplines provides students with a broader range of problem-solving approaches. This interdisciplinary mindset equips students to better address complex issues in automotive design and enhances their problem-solving capabilities.

Additionally, interdisciplinary collaboration enhances the practicality and applicability of automotive design education. Traditional approaches often prioritize theoretical instruction at the expense of practical training. However, automotive design is a highly practical subject that necessitates hands-on experience for students to master relevant knowledge and skills. Through interdisciplinary cooperation, institutions can introduce more practical projects and case studies, offering students increased opportunities for applied learning. Moreover, research outcomes and technical advancements from other disciplines can provide novel insights and methodologies for automotive design education, further augmenting its practicality and applicability. Achieving effective interdisciplinary collaboration, however, presents challenges. Educational institutions need to establish an interdisciplinary curriculum system that organically integrates knowledge from various disciplines. This requires profound reform and innovation of existing curricula, breaking down disciplinary barriers to facilitate knowledge intersection and integration. Furthermore, institutions must strengthen partnerships and exchanges with other universities, research organizations, and industries to jointly conduct interdisciplinary research and educational activities. Such collaborations enable resource sharing and complementary advantages, further promoting the development of interdisciplinary cooperation.

In the implementation process, institutions can adopt several measures to foster interdisciplinary collaboration. Firstly, they can establish interdisciplinary teaching teams comprising faculty from diverse disciplines to collectively undertake automotive design course instruction. This approach leverages the professional expertise of various disciplinary instructors, providing students with more comprehensive and in-depth educational experiences. Secondly, institutions can initiate interdisciplinary research projects, encouraging student participation to cultivate research skills and innovative thinking. Thirdly, organizing interdisciplinary academic exchanges and practical activities, such as seminars and design competitions, can provide students with enhanced opportunities for exchange and learning. Through interdisciplinary collaboration, automotive design education can offer students a more comprehensive and profound learning experience, nurturing their overall competence and innovative capabilities. Concurrently, this approach will contribute to the rapid advancement of the automotive design industry, making significant contributions to societal progress and development.

3.4. Establishment of Practical Teaching Base to Provide Practical Training Opportunities

In the context of automotive design education reform, incorporating cutting-edge courses and guiding students to focus on industry trends are crucial measures. The automotive industry is experiencing unprecedented changes due to rapid technological advancements, including the emergence of new energy vehicles, intelligent connected vehicles, and autonomous driving technologies (Barakat, 2024; Gianolli, 2020; Hoeft, 2024; Totlani, 2023). Consequently, the knowledge base in automotive design is continuously expanding and evolving. To address this, higher education institutions must adapt their automotive design curricula to integrate contemporary knowledge, thereby preparing students for future industry demands. Introducing frontier courses is a key component of this educational reform. These courses should encompass the latest technological achievements and industry trends, covering topics such as new energy vehicle design, intelligent connected vehicle technology, and autonomous driving systems. This approach enables students to comprehend and master cutting-edge technologies, design concepts, and their practical applications. Additionally, inviting industry experts, scholars, and business representatives to deliver lectures can provide students with valuable insights into current industry practices and future trajectories.

Alongside curriculum enhancements, it is essential to guide students in monitoring industry trends. The automotive sector's dynamic nature necessitates that design students maintain a keen awareness of evolving technologies and market demands. Educational institutions can facilitate this by organizing industry visits, practical projects, and utilizing online platforms to disseminate current trends and research findings. This approach encourages students to contemplate the practical applications of their acquired knowledge. Interdisciplinary collaboration is another vital aspect of this educational reform. Automotive design intersects with various fields, including mechanical engineering, materials science, electronic engineering, marketing, and user experience. By fostering interdisciplinary courses and exchange activities, students can develop a more comprehensive understanding of automotive design's multifaceted nature and its future trajectory. In implementing these reforms, several key considerations should be addressed:

1. Balancing theoretical knowledge with practical application through industry partnerships and hands-on learning opportunities.
2. Nurturing students' innovative thinking and design skills through design competitions and creative workshops.
3. Maintaining close alignment with industry developments to ensure that the education provided remains relevant and forward-looking.

By adopting these strategies, automotive design education can effectively prepare students for the evolving demands of the industry, fostering innovation and adaptability in future professionals.

3.5. Cutting-Edge Courses to Guide Students to Pay Attention to Industry Trends

The establishment of practical teaching bases represents a crucial step in fostering successful career paths for students specializing in automobile design. These bases provide students with authentic and comprehensive practical environments, serving as valuable platforms for applying theoretical knowledge to practical skills. The importance of well-equipped facilities cannot be overstated. To expose students to cutting-edge automobile design technology, bases should be furnished with modern laboratories, including advanced computer-aided design software and 3D printing equipment, enabling students to engage in scheme design and model creation. Furthermore, advanced manufacturing equipment and technology are essential components, allowing students to gain in-depth understanding of the entire automobile manufacturing process, from material selection and processing to assembly and debugging. Students should have hands-on experience with each stage of this process (Alabi, 2019; Black & Kohser, 2020; Haury & Rillero, 1994). The practice teaching base should also incorporate design studios that simulate real-world working environments, mirroring the layout of automobile design companies with designated work areas, discussion spaces, and exhibition zones. This setup enables students to acclimate to professional environments preemptively.

Collaboration with enterprises is another critical aspect of these bases. Through partnerships with automobile manufacturers and design firms, bases can introduce practical projects and provide students with opportunities to

participate in actual research, development, and production processes. This cooperative model enhances students' practical abilities while familiarizing them with industry trends and preparing them for future career development. Effective management and operation of the practice teaching base are paramount. A comprehensive management system should be established to ensure orderly practical instruction. Concurrently, the base should prioritize the development of its teaching staff, attracting educators with extensive practical and teaching experience to provide expert guidance to students. Regular academic exchanges and technical training activities should be organized to elevate students' academic prowess and innovative capabilities.

Integration of practical and theoretical teaching is crucial. Theoretical instruction should focus on guiding students to understand fundamental principles and methods of automobile design while cultivating innovative thinking and problem-solving skills. During practical teaching, instructors should fully utilize the resources and facilities of the base, engaging students in various practical projects to apply their theoretical knowledge. The practice teaching base should also cater to students' individual development needs. Recognizing that students have diverse interests and aptitudes; the base should offer a range of practical projects and activities. For instance, students interested in automobile modeling design could participate in exterior design projects, while those focused on performance optimization could engage in activities related to power systems and chassis adjustment.

The successful establishment of a practice teaching base requires strong support from both educational institutions and governmental bodies. Schools should increase investment in these bases, providing necessary venues, funding, and equipment. Simultaneously, governments should implement policies that encourage and support university-enterprise cooperation in establishing practical teaching bases, promoting the deep integration of industry, academia, and research. In conclusion, the establishment of practice teaching bases is of paramount importance for students majoring in automobile design. By enhancing facilities, strengthening management, deepening cooperation, focusing on integration, and addressing students' individualized development, these bases can provide a comprehensive practical environment. This approach helps students master core knowledge and skills in automobile design, laying a solid foundation for their future careers in the industry.

4. Conclusions

This paper demonstrates that teaching reform is a crucial element in ensuring automobile design education remains current and aligned with industry developments in higher education. Through the implementation of various strategies, including strengthening the integration of theoretical knowledge and practical application, emphasizing the development of innovative thinking and design skills, and refining the curriculum and instructional content, students' professional competencies and practical abilities can be significantly enhanced. To keep pace with the rapid evolution of the automotive industry, it is imperative that automobile design education continues to undergo reform and innovation in its educational approaches and methodologies. By persistently refining and optimizing the teaching system, educators aim to nurture a new generation of exceptional automobile design professionals equipped with innovative mindsets and practical expertise, thereby contributing to the growth and advancement of the automotive sector.

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