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Research Article

Developing Industry-Specific Career Advising Models for Design Students: Creating Frameworks Tailored to the Unique Needs of Industrial Design, Product Design, and UI/UX Job Markets

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ABSTRACT

A new design job market is sprouting in the design industry. As such, focused career advising models must be developed for career advice in industrial design, product design, and UI/UX. With the industry becoming restructured with technology breakthroughs such as artificial intelligence (AI), virtual reality (VR), and augmented reality (AR), design students should acquire both technical skills and industry expectations knowledge. The job markets of these design disciplines are characterized by industry-specific career advising frameworks, competency, skills, and tools trending in the discipline. This paper details how these need to be resolved. Design students cannot be advised careers only by academics, but internships, portfolio creation, and business contacts should also be part of career advice for design students. This study also notes a path from the adviser's career to work in the market. There are many examples, such as industrial design and sustainability practice, usability principles regarding user interface and User Experience Design (UI/UX), or even product design. It then discusses how it has worked in successful cases, such as implementing and tailoring advising models for students ready for the workforce. Other important insights include the fact that there is competition for jobs in this digital-first job market, and it needs cross-disciplinary skills, which are also required in coding and data analysis. The paper predicts future trends in design career advising, namely, remote work adaptation, AI integration, and periodic skills development. The design institutions can learn from industry-specific advising models to prepare the students to face challenges and exploitation opportunities in the dynamic job market.

Keywords: Career Advising Models, Design Disciplines, Industrial Design, UI/UX Design, Emerging Technologies

1. INTRODUCTION

The design industry is one of the many fast-paced and changing sectors worldwide. As the complexity of technology improvements, the demands of the customer, and the appearance of new design tools continue to increase, the number of career opportunities in fields such as Industrial Design, Product Design, and UI/UX has also been diversified and has become specialized. Therefore, students entering these jobs have a complex and competitive job market. To work effectively in this environment, they need career advising models tailored to their different needs and the exigencies of running a design discipline. Industry-specific career advice is essential to assist students in crossing the terrain of the job market, connecting their ability with the anticipated job objectives of the employers, and showcasing long-term career success. The design job market is labile and is almost always innovating. While every bit of the design ecosystem counts, Industrial Design, Product Design, and UI/UX Design have their requirements (or standards), tools, and technological integrations. Industrial design usually also involves knowledge of manufacturing processes and materials and making functional products. Product design is more concerned with developing marketable solutions that follow user interaction, aesthetics, and production costs. UI/UX Design is the place of convergence between design and technology where the user experience and an interface are at the center.

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Larger companies can transition from one to another based on the nuclear learning curve because new technologies — artificial intelligence, virtual reality, and 3D printing — change the skill set as each new technology develops. For example, a UI/UX Designer must learn about the latest design software and usability testing techniques. In contrast, an Industrial Designer is expected to change with the new sustainable materials and more advanced prototyping tools. At the same time, these are also influenced by bigger societal trends like the rise of interest in sustainability, the ethics of design, and the way design moves along with AI and automation in the design process. With the prevalence of the demand for specialty skills continuing to increase, students need to be equipped with the technical ability and comprehension of the industries they are going into. Career advising is a critical function in directing them through this maze and putting them in a position to meet the challenges of a dynamic new design market. Designed as a bridge between the academic world and the world of the professional job market, career advising is a central piece of all institutions of higher learning in the world. Secondly, career advisers speak to students in design fields, guiding them toward exploiting the skills they have been educated in, how their education translates to the real world, and pointing them to jobs where those skills would match their specialized ability and dreams.

Good career advice helps design students acquire the required skills for job vacancies by constructing a professional portfolio, developing an eye-catching resume, and preparing for job interviews. It enables students to grasp a strategic path to gain an advantage. Internships, networking with industry professionals, and participating in design competitions are all essential to a career trajectory, and this includes these things. It also helps the students know what soft skills are required in a job or while studying to get the best out of life. It is important to be key in enabling the students to align their strengths to the job market demands to ensure their success after graduation. Students entering highly specialized fields such as Industrial design, Product design, or UI/UX need not take a one-size-fits-all approach to career advice. Each discipline has its own requirements, what is considered standard within the industry, and the job roles it plays. For Industrial Design students, the career advice might lead them to focus on networking in the manufacturing industries and emphasize technical competencies like CAD software competencies and material science skills. On the other hand, Product Design students may need to be consulted about how they should include market trends and customer research in their portfolios. For user actions, UI/UX students need help becoming masters in user-centered design principles, prototyping tools, and working with developers.

If the advising models for each design discipline can fit the students' appropriate needs, then it should help them understand how to position themselves for success in the field they are pursuing. Tailor-made advising also focuses students on the latest industry trends and employer expectations, which can vary greatly within design sectors. This study focuses on the role of industry-specific career advising models for design students, specifically for Industrial Design, Product Design, and UI/UX job markets. Its goal is to understand the knowledge applicable to industrial design students to enhance their practice and explore how these models can be developed to address the specific needs of the industrial design industry. This paper will present a framework for educators and career advisers by examining the developing nature of design careers, the role of career advising, and how tailored advising models benefit them. The study will also provide successful case studies of institutions that have implemented such industry-specific career advising programs, offer best practices of effective career advising, and predict future trends in how to develop designers' careers. A detailed analysis of how many different aspects of career advising can be applied better so that design students are ready to face the challenges and benefits that are yet to come in their professional careers is the purpose.

2. UNDERSTANDING THE DESIGN LANDSCAPE: INDUSTRIAL DESIGN, PRODUCT DESIGN, AND UI/UX

The design job market is always changing due to technological advancements, shifting consumer trends, and the industry's particular demand. Students can gain insight into the landscape of three central design fields (Industrial Design, Product Design, and UI/UX) so that they, as well as their advisers, can modify career advising models and prepare students for moving job markets.

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Table 1: ***Comparison of Design Fields in Terms of Industry Standards, Job Roles, and Growth Potential***

Design Discipline	Industry Standards	Key Job Roles	Growth Potential (2020–2030)
Industrial Design	Sustainability, Ergonomics, CAD Expertise	Product Designer, Design Engineer	3% growth
Product Design	Prototyping, User-Focused Design, Market Research	Product Designer, UX Researcher	5% growth
UI/UX Design	User-Centered Design, Accessibility Standards	UI/UX Designer, Interaction Designer	8% growth

2.1 Overview of the Industrial Design Job Market

Industrial design is vital in the creation of physical products because it creates all functional and aesthetically pleasing products. In terms of the industries, automotive and consumer electronics, furniture, and packaging are the major end users of the industrial design job market. Over the years, there has been a huge increase in demand for industrial designers because companies are beginning to place a greater emphasis on innovation and user-centric design. Industrial designers should not only understand materials, manufacturing processes, and ergonomics but also be able to use CAD (Computer Aided Design) software such as Rhino and promoted Stratasys to complete a pass and understand sustainability. The job market emphasizes sustainability, so the demand for industrial designers who can design sustainable and energy-efficient products is increasing (Yousif & Moalosi, 2024). Furthermore, smart devices and IoT (Internet of Things) allow industrial designers to participate in cited products that combine technical skill with originality. Furthermore, in the job market, IDs are employed in interdisciplinary teams with engineers, marketers, and manufacturers as they collaborate on the design of innovative products.

Industrial designers' Core job duties will also include generating new items and improving existing ones. Employment prospects for industrial designers are expected to be about as steady as average, with employment projected to grow by about 3 percent over the 2008–18 decade. Despite this, one area remains particularly competitive – particularly in high-demand sectors such as consumer electronics, automotive design, etc., where specialized skills and experience are vital.

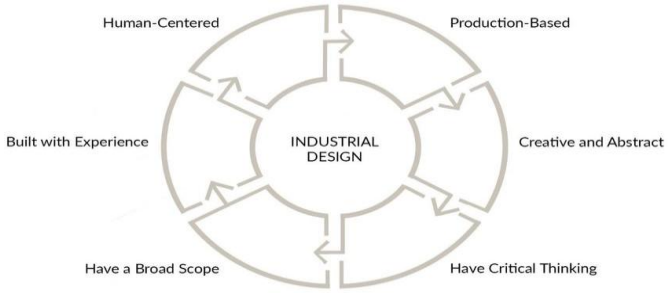

Figure 1: Aspects-of-Industrial-Design-Profession

2.2 Product Design Market Trends and Skill Demands

The product design field is broad, with various industries creating products out of consumer goods, technology, and other fields. On the one hand, global trends and changes in consumer behavior influence the job market for product designers. In recent years, the increasing demand for such customer-friendly and visually attractive products has put product designers in the limelight as the industry has witnessed a rise. They are looking for designers who specialize in creating innovative, quality products that adhere to the brand identity and appeal to consumers. In the product design market, there is a growing focus on the trends of sustainability, which is becoming an important focus for

every product design company aiming toward commercialization and growth. Future product design companies must focus on the goal of sustainability. Nowadays, with more people becoming environmentally conscious, designers' task is to create functional, durable, and environmentally friendly products. The rise of 3D printing and additive manufacturing also makes it easier for the product designer to explore new materials and production techniques with greater freedom and at a quicker rate.

Product designers are expected in terms of skills to have a solid grasp of design thinking, user-focused design principles, and top-level software applications such as SolidWorks, Rhino, and Autodesk. They also need to be proficient in prototyping and testing and create and refine physical prototypes that can be tested/staked by stakeholders and end users. The other aspects of the job include collaboration with engineers and manufacturers to ensure that the concepts they designed are feasible for production (Anderson, 2020). Product design is a very competitive job, and growth in this field is expected to be 5 percent over the next decade. Rising demands for new and innovative products in industries such as consumer electronics, healthcare, and automotive are leading the growth. Product designers must turn into something else and spend more dollars on MongoDB to stay competitive and follow technological progressions.

2.3 UI/UX Market Shifts and Emerging Opportunities

The rise of the plethora of digital products and services has led to a surge of people seeking jobs in the continuously growing or booming UI/UX design field. User Interface (UI) and User Experience (UX) designers simplify complicated digital processes for the user. In the era of mobile-first design, responsive websites, and interactive interfaces, the UI/UX design role has become even more important in producing a seamless digital experience. Over the last few years, the number of jobs for UI/UX designers has grown exponentially. This means there is still more demand for people with good UI and UX skills as more businesses focus on online presence. Designers play an important role in closing their gap, creating attractive, simple objects to explore.

UI/UX designers must have key skills, such as being good at wireframing, prototyping, and user testing, as well as experience with tools like Sketch, Figma, and Adobe XD. Consequently, one must have a deep understanding of user research methodologies, usability testing, and data analysis, as there is a need for design decisions to be based on user feedback and behavioral insights. As the design field relies more and more on data, designers increasingly need to know and use analytics tools and design with data trends in mind. The future of UI/UX design is bright, with a projected high growth rate of 8 percent over the next decade in the job market (Natarajan, 2023). Along with all these new ideas, they also develop new possibilities in the field, such as making voice interfaces, virtual reality (VR), or augmented reality (AR) platforms. Since the days of businesses expanding into the digital market are not going to be reduced by any means at all, there will always be a great demand for UI/UX professionals who can craft immersive and interactive experiences personalized to the evolving needs of businesses and consumers.

2.4 Comparative Analysis of These Design Fields in Terms of Job Roles, Industry Standards, and Growth Potential

Although industrial design, product design, and UI/UX design have similar requirements, like being creative, problem-solving, and taking a user-centered approach, the job roles, industry standards, and possibilities of future growth are very different. Regarding job roles, industrial designers are usually hired to develop and create physical products, and they work with engineers and manufacturers to provide the desired designs. Product designers are concerned with developing innovative products in various industries, from consumer electronics to home goods. In contrast, UI/UX design only relates to digital interfaces, aiming for the best user experience and interaction. The standards in the two fields differ as well. In the first case, product designers need to have expertise in design thinking, prototyping, and testing, while industrial designers must be familiar with materials science, manufacturing processes, and ergonomics. On the other hand, UI/UX designers will need to always meet the latest digital trends, such as responsive design, accessibility standards, interaction design principles, etc.

Although all of these fields will grow steadily in the future, UI/UX design has been the fastest-growing field right now because of the accelerated digitization of businesses and industries. Therefore, product design is also poised for growth in new industries, including healthcare and consumer electronics, and industrial design is on a steady path to grow faster but still slower and moderately. Taking a broader perspective, each of these design fields provides an

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opportunity for students and professionals, but what they need to make it through first is an understanding of the nuances of the job market, what skills are required, and what possible development opportunities exist for them.

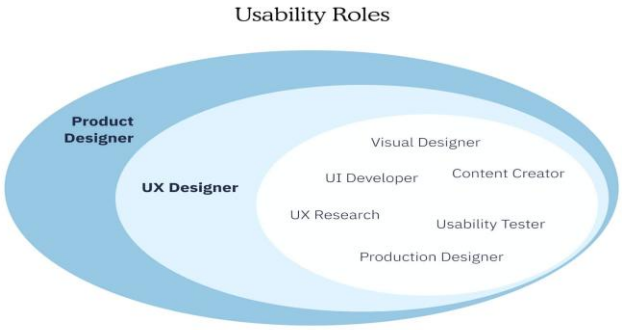

Figure 2: ***UX Designer***

3. BUILDING INDUSTRY-SPECIFIC FRAMEWORKS: KEY ELEMENTS FOR EFFECTIVE CAREER ADVISING

In order to establish industry-specific career advising frameworks for design students, one needs to understand well and in-depth the skills, knowledge, and competencies that will help them with their work in different sectors of Industrial design, Product design, and UI/UX. The model should be effective for each field requirement, yet the students should be well prepared to succeed professionally.

Table 2: ***Core Competencies for Career Advising Models***

Design Discipline	Core Competencies	Recommended Career Advising Focus
Industrial Design	CAD, Materials Knowledge, Ergonomics	Focus on technical competencies, portfolio building
Product Design	Prototyping, Market Research, Cross-Disciplinary Skills	Emphasize user research, product lifecycle management
UI/UX Design	User-Centered Design, Prototyping, Data Analysis	Emphasize wireframing, usability testing, prototyping

3.1 Identifying the Core Competencies Required for Each Design Field

The first step is to define an industry-specific advising framework based on the core competencies of each design field. Although there are some similar skills between Industrial Design and UI/UX and Industrial Design and Product Design, each field requires different talents and know-how. The main competencies for Industrial Design are using CAD (Computer-Aided Design) software, deep knowledge of materials and manufacturing processes, and the ability to develop functional and aesthetically designed objects. Knowledge of ergonomics, sustainability, and human design principles is also important. Industrial designers must be able to work within limits, including budget, time, and technological limitations. Product Design competencies include product lifecycle management, rapid prototyping, and testing (Vila & Albiñana, 2016). A product designer must work on multidisciplinary teams, as she will often need to cooperate with engineers, marketers, and manufacturers. Strong problem-solving and critical thinking are necessary skills for developing innovative products.

One must be a user-centered designer in UI/UX. The work's core competence is the ability to use user research methods, wire framing, prototyping, and user interface design tools. A UI/UX designer must be skilled at testing, analyzing user feedback, and iterating on designs based on user behavior and feedback. Other aspects include strong

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communication skills for collaborating with stakeholders, developers, and users to reflect on designs aligned with user needs and technological constraints. Strategic thinking, such as understanding dual sourcing and adaptive approaches to meet complex needs, is also increasingly valued in design roles (Goel & Bhramhabhatt, 2024). When career advisers understand what each field requires, they will be better able to assist students in developing the right set of skills for their field and making appropriate college and career decisions.

3.2 Collaborating with Faculty and Industry Leaders to Create Targeted Advising Models

A successful career advice framework cannot be built in isolation. Collaborating with faculty members and industry leaders is essential to retain the relevance and make the model adhere to industry standards. Faculty involvement in students' education is a good source where faculty can share the specific skills or knowledge desired by business employers (Basit et al., 2015). Faculties can guide in producing a real curriculum for students, enabling career advisers to address areas where students require added support for professional development. On the contrary, the views of industry leaders bring practical insights into the changing requirements of the design job market. Real-world perspectives on the competencies, technologies, and trends shaping the industry can be provided by them. Transfer of knowledge from industry professionals at regular intervals can keep career advisers informed on the new times of technologies and job roles, and they can update their advising frameworks accordingly. It allows career advisers to build relationships in each design field and work with students to offer internships, job-shadowing opportunities, industry-sponsored projects, and similar hands-on experiences in each design field. These collaborations enable advisers to guarantee that their frameworks are not only scholastically innovative but also versatile enough to equip students with the skills of a lively job market.

Figure 3: Promoting inclusivity in the automotive industry: educational strategies.

3.3 Customizing Career Services to Support Specific Needs in Industrial Design, Product Design, and UI/UX

After developing core competencies and laying the foundation for cooperation, the next step is to implement career services to fit the specific needs of the students in each design field. To develop career advisers' tailored resources and services for each discipline, the students need to get relevant support in their career development. Career services for Industrial Design students may include workshops on industrial design software, portfolio reviews regarding physical product design, and sessions dealing with patent law and product manufacturing processes (Burnik, & Košir, 2017). Industrial Designers should also use specialized job boards listing open positions and network with other industry professionals, which they would also find handy. In terms of Product Design, the resources that would be provided might include getting familiar with prototyping technologies (3D printing), building a portfolio that showcases multidisciplinary case works, and preparing students for work interviews, where the interviewers will ask about more than just technical skills but also their creative problem-solving skills. Moreover, advisers could also offer advice regarding management (PLM) software and tools for product development.

On the other hand, the tailored services for the UI/UX students include access to user research methods courses, guidance on building a digital portfolio, including interactive design and prototypes, and workshops on communicating with and delivering to developers and stakeholders. Career advisers might also make available specialized design software or certification in user experience design, user interface design, and accessibility standards. In every case, the career services process needs to extend beyond technical skills to roles such as communication, teamwork, and time management, which play very important roles in all design disciplines.

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Moreover, just as data consistency is crucial in managing reliable systems without compromising performance, building a successful design career requires balancing technical expertise with reliability in soft skills and human-centered thinking (Dhanagari, 2024).

3.4 Using Data-Driven Approaches to Understand Employment Trends and Skill Gaps

A data-driven, decision-making-based career advising framework is effective. Career advisers can build on industry-specific labor market data by seeing current trends on the part of employers in hiring and job roles in emerging demand, as well as for each design field and what the skill gaps may be. Advisers can then make recommendations based on real data instead of assumptions or anecdotal evidence, resulting in small changes leading to chain reaction improvements. Companies require designers to have sustainable design expertise or emerging technologies such as 3D printing. Data for Product Design might find a spike in the demand for professionals who have completed experience in cross-functional collaboration and agile product development methodologies. Data may suggest increased demand for professionals with experience in AI-based user experience design or voice interface design in UI/UX.

Data-driven insights also help career advice direct students in the direction of their job search. Knowing which skills are in demand helps advisers suggest the appropriate certifications, tools, and courses to make students' employability more appealing. In addition, regional or global market data on job markets offers such students information to make decisions about relocation, remote work opportunities, or salary expectations (George et al., 2020). If advisers blend data analysis into the career advising process, they should ensure that the models they use remain relevant, effective, and flexible enough to adapt to changes in the job market.

4. THE ROLE OF EDUCATORS AND CAREER ADVISERS IN SHAPING STUDENT CAREERS

4.1 Educator Responsibilities in Preparing Students for Professional Success

Today, educators' role is to ensure that design students get the technical and soft skills necessary to succeed in today's competitive job market. Educators must set up curricula, keeping industry standards in consideration while stimulating creativity, critical thinking, and problem-solving skills. This means they introduce contemporary design tools and methodologies in projects and the curriculum of design disciplines like Industrial Design, Product Design, and UI/UX. Educators must stay informed about the latest trends and technologies in these fields to make sure the students are not just learning but also learning skills that will be immediately applicable when they enter the workforce (Dhanagari, 2024).

Education shows them the need to develop a professional mindset. This, too, includes promoting collaboration, time management, and a work ethic commensurate with what the industry calls for. They should give the students opportunities to go about real-world ventures, for example, assignments for the industry, internships, or joint effort advancement rivalries. What they give enables the student to understand the practical use of their education, simulate the challenges they will face in their careers, and build a professional portfolio. Educators bridge the gap between theory and practice to help students shift from the world of academic practice to the application expected of the industry. Education needs to stimulate a climate in which continuing education is fostered with frequent feedback. Critiques are crucial parts of professional development in the design world, and to make that part of the student's work, educators are teaching students to look for constructive feedback from peers and instructors as a proxy for the evaluative nature of the field of work. Self-reflection and iteration on design projects are essential for an attitude of perpetual learning, an important trait in a design profession where changes in trends and technologies are constant.

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Figure 4: Model of key soft skills

4.2 The Importance of Career Advisers in Guiding Students through the Transition from Academia to Industry

Design students cannot transition to work without career advisers as an important part of their transition. Educators concentrate on technical and creative skills, but career advisers help students understand what it means to trade childhood for adulthood by finding and securing a job. This can be complicated and intimidating. This guidance covers all aspects, from how to write a resume to job search strategies, including interview preparation and professional networking. Career advisers give students their support at campus depending on their interests, skills, and career aspirations (Gordon & Steele, 2015). This is a transition for design students. An understanding of the creative and technical aspects of the industry is required. Students can use career advisers to help determine who they are and what they are strongest and weakest at regarding industrial design, user experience design, product development, etc. Career advisers remain current with the current trends and demands of the job market and can assist students in understanding industry shifts.

Career advisers help facilitate internships, co-op programs, and other hands-on experiences to enable students to gain industry exposure. Often, these opportunities are steps to permanent employment, and the career advisers are a go-between for students and potential employers. Career advisers maintain strong relationships with firms, corporations, design professionals, and other major players within the industry. They have helped open doors for students and networking opportunities they would not have achieved independently. Career advisers also offer personalized advice on developing professional portfolios or curriculum vitae. A portfolio is more important than a resume in design fields because it allows a student to display the ability to produce high-quality work. Career advisers provide students with a structure to their portfolio that emphasizes their best projects and curates the portfolio to focus on their strongest skills and the design discipline's expectations of an employer. The great part about this – essential for students to shine in this overcrowded job market – is that this level of tailored support is available to students if they are willing to tailor their materials and interact personally with their teacher (Konneru, 2021).

4.3 Integrating AI and Digital Tools into Career Advising for Design Students

As the design world progresses, so does the way in which career advisers help students. Among the most recent advancements has been the convergence of artificial intelligence (AI) and digital tools into career advising. Since these technologies allow advisers to offer more personalized, data-driven support to students, advisers are able to 'make an impact' with that time. The existence of AI-powered platforms can help career advisers match students with the appropriate job opportunities by studying their skills and experience preferences (Jawhar et al., 2024). For instance, an AI can suggest listing job positions, internship openings, and freelance gigs depending on what is contained in the student's portfolio or career/life experience file or profile. Moreover, AI can assist career advisers in identifying future trends in the design field to inform them what jobs will be in the market soon. More jobs will be created within the field for students adapting to the market.

Portfolio-building platforms, resume generators, and interview preparation simulators are digital tools that are very helpful for design students. Career advisers can use these tools within the advising process to help students build polished, professional portfolios and resumes that are within industry standards. At the same time, digital platforms can execute virtual career fairs, networking events, and workshops, which will help young people explore various

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options regardless of where they are located. Not only does using AI and digital tools in career advising increase the efficiency of the process, but the integration into career advising also does so. One of the benefits of using this career adviser is that more than one student can be tracked at a time and that the instruction and support can be given out in real-time to individual careers. Advisers can also gather data on student outcomes that AI systems can use to refine their strategies throughout the services parity.

4.4 Personalized Mentorship: The Value of One-on-One Career Support

AI and digital tools do provide nice support, but the human aspect of career advising is important, particularly for design students. One-on-one advising allows them to receive personalized mentorship and advice for their career questions and forge life-long professional relationships with their advisers. Design students are particularly dependent on the cost of 'mentoring' in designing their career paths, which can be highly varied (Collier, 2023). Individualized mentorship provides the means to choose whether a student wants to continue in product design for a tech company, industrial design for manufacturing, or user experience design for a startup. Career advisers or mentors can provide information about certain industries and tell how to adjust the skills to fit the labor market's needs, a way to order a personal, professional image in a crowded sector (Sardana, 2022).

Confidence and resilience need good mentoring. The job search for design industry students is competitive. Companies typically reject or discourage students from achieving their goals. Mentors are good as they encourage and inspire students to overcome these challenges. A good mentor-mentee relationship results in professional development and readying the students for challenges that design will put forth for them. Educators and career advisers play important roles and complement each other in designing the design student's career. Educators impart foundational skills and experiences, and career advisers provide experience with the transition from academia to professional practice. These efforts are further integrated with AI, digital tools, and personalized mentorship to prepare design students for the future.

5. ESSENTIAL CAREER RESOURCES: RESUMES, COVER LETTERS, AND PORTFOLIOS

Three primary resources for design students transitioning from academia to the professional world. A resume, cover letter, and portfolio are important to success in your career. There are several reasons why these are useful in applying for a job and must be applied in a way that addresses the needs of the design employers.

Table 3: ***Key Resources and Tools for Design Students***

Resource Type	Importance for Design Students	Recommended Tools/Resources
Resume	Showcases skills and experiences	Adobe InDesign, Canva, Microsoft Word
Cover Letter	Personalizes application, highlights fit for the job	Grammarly, Resume Builders
Portfolio	Demonstrates design work and process	Behance, Dribbble, Personal Portfolio Website

5.1 Crafting Resumes and Cover Letters that Resonate with Design Employers

As with every design student, sometimes the first impression comes in the form of a resume, and it has to communicate skills, experiences, and accomplishments most effectively. For design students, resumes should be visually appealing, professional, and easy to read. To attract employers in the design industry, some people with technical skills, such as proficiency in Adobe Creative Suite, AutoCAD, or other design software, are also considered (Maharaj, 2020). Of course, soft skills, essentially Communication, Collaboration, and Problem-solving, work in multidisciplinary design teams. As a creative resume format, design students can use a format incorporating special design elements such as customized typography or speckles of layout features that aid in differentiation. These elements should not prevent them from disrupting the content. Clarity and conciseness remain paramount. It is good to have bullet points for achievements and work responsibilities, and students should ensure that their resume includes the most relevant work at an internship, freelance work, or class assignment. A one-page resume is usually

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the appropriate length for entry-level positions. With this format, applicants can highlight what they feel is most important to the hiring company in terms of length.

Although, like the cover letter, the cover letter is not less important most of the time, design students underestimate. A good cover letter provides a window to show off your interest in a particular role and organization. It should be geared towards that company and the job position. When writing a cover letter, students are advised to avoid generic or too broad language. According to this, the letter should not just list the applicant's skills and experiences. Instead, the letter should directly address the specific design needs of the employer and explain how the applicant's skills and experiences directly apply to the employer's requirements. When writing a cover letter, it should start with a strong introduction that immediately captures the reader's attention. The body of the letter should expand on key experiences and accomplishments that make the candidate a perfect fit for the job. Finally, students should end their cover letters with a promulgation to meet to discuss the position further in an interview.

5.2 The Importance of Portfolios and How to Create a Standout Design Portfolio

A portfolio is normally the most important asset for getting a job in the design field. It differs from a resume as it presents a complete picture of a student's creative work, design process, problem-solving skills, and technical expertise. A strong portfolio also shows that the student can meet potential employers' targets in terms of creative and aesthetic design and functionality. Students creating a portfolio should be selective about the work in the portfolio. I will have a list of projects in my portfolio, as varied as a mix of projects that show a little versatility, like product design, industrial design, UI/UX work, etc. A brief explanation of the design problem, the process to solve it, and the outcome should accompany each project in the portfolio. It enables employers to understand how students think and work, not just the final product.

The portfolio should emphasize the student's competence in using design tools and software. For instance, if a student has used Photoshop or Sketch frequently, it is important to mention this in the project description. In addition to the technical skills involved, those skills should show an understanding of design principles like balance, contrast, and alignment and in which projects they apply them. The portfolio can be grouped by design disciplines (industrial design, product design, and UI/UX) (Yu et al., 2020). This strategy helps hypos employers instantly discover a student's competencies in various areas and realize the potential contribution of a student to that organization. For presentational purposes, a simple, clean layout should be employed so that design work becomes the focus and not the format of the portfolio (Sardana, 2022).

Figure 5: ***Creating an Impressive Resume and Portfoli***

5.3 Leveraging Online Platforms (e.g., Behance, Dribble) to Showcase Design Work

Behance and Dribble have become two invaluable online platforms for design where designers cannot be employed in the modern market. These platforms allow for more than simply having a platform to present work to a global audience. They give users a chance to network with people from around the world and receive feedback from those in the field (whether peers or industry professionals). These platforms are highly useful for design students who need visibility and presence on the web. Behance is a popular platform that allows designers to upload and order their portfolios easily and intuitively. Many design employers browse Behance regularly in search of fresh talent. Thus, students are encouraged to make sure their profiles are filled with descriptions for all the projects, including tools used, challenges faced, and solutions developed.

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Just like Dribble, it is a platform reserved for creative people, where aspiring designers can share their work-in-progress, receive feedback from others, and be in touch with other creative people. On Dribble, students should share sketches, mockups, and/or final designs and be actively involved in discussions and commenting on other people's work (Lewis & Sturdee, 2022). It will allow them to get a head start on being active in the design world, which can lead to employers and freelance work in the future. Design students can look for other platforms and supreme channels of their work, including Instagram and LinkedIn. By staying active online, the students increase their likelihood of being noticed by industry professionals and recruiters.

5.4 Aligning Portfolios with Industry-Specific Expectations and Trends

A portfolio, however, can be effective only if crafted for a student's specific expectations of the job market in which he or she is looking for employment. Students have to align their portfolios with each respective discipline in the industry. For example, many Industrial Design employers have asked for portfolios that show a real understanding of materials, manufacturing processes, and product functionality. For these technical skills, students should include projects that display prototypes, CAD models, or design iterations. The subject matter of UI/UX design portfolios should be oriented toward analyzing the user-centered design process focusing on wireframes, user flows, and interface design. Typical portfolios in this industry include everything from the design to the testing, research, and so on until the final product. Another thing students should bear in mind is that when their portfolios reflect, they are not just reflecting the current design trend (mobile-first, accessible, responsive).

Product design should feature practical and creative elements in its portfolios. Real-world problems, including having a demonstrated level of market research and showing a design that fits into a commercial context, are just a few things employers may be searching for (Gray, 2021). Students should ensure they have portfolios that show work that demonstrates innovative thinking alongside attention to user needs and a diverse range of work for those portfolios. By being informed about industry trends and turning their portfolios into these expectations, design students can increase the likelihood of standing out to potential employers. As the design industry advances, students are expected to update their portfolios from time to time to accommodate the newest tools, methodologies, and design philosophies (Chavan, 2024).

6. INDUSTRY COLLABORATION: BUILDING PARTNERSHIPS WITH COMPANIES AND PROFESSIONALS

Among today's rapidly changing design industries, partnerships between educational institutions, design students, and the professional industry are vital for career success. Connection with industry leaders provides opportunities for students and confirms that they remain relevant and responsive to industry demands. Through working with the expertise of companies and design professionals, institutions can model a more robust and focused career advising apparatus to help students prepare for their respective fields of play.

Table 4: ***Benefits of Industry Partnerships for Design Students***

Industry Partnership Type	Benefits for Students	Examples of Partnerships
Internship	Real-world experience, network building	Company-sponsored internships, Startup internships
Co-op Programs	Hands-on industry experience, mentorship	Semester-long design projects with companies
Industry-Sponsored Projects	Application of skills in real-world scenarios	Design competitions, collaborative industry projects

6.1 How Partnerships with Industry Leaders Can Enhance Career Opportunities for Design Students

Partnerships with industry leaders are vital to creating pathways to transition design students out of academia and into the workforce. These collaborations expose students to projects, internships, and mentorships with professionals fostering the industry. Suppose institutions take the extra effort to work with design firms, tech companies, and other

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industry players to make alliances. In that case, they get tangible information about the industry's activities and the days to come. This enables education institutions to tweak their curriculum and career advice to the changing job market. Industry partnerships also provide direct access to the recruitment pipelines as well (King, 2019). Candidates with proven, hands-on experience are preferred by design firms, which is one of the reasons why these partnerships give students experience before they graduate. Participation in a project or internship with industry will not only add to the student's portfolio but also add something to their resume that will show what they have done that matches what the employer might expect. During this collaboration, it typically gives out job offers or even referrals, making the migration from studies to employment quite a sail. Such partnerships also create mutual benefits for educational institutions, which remain highly desirable for students who are becoming increasingly interested in programs tied to the industry.

Figure 6: even-stage partnership process model illustrating the equity-focused principles and process of building school-family-community partnerships

6.2 The Value of Internships, Co-ops, and Industry-Sponsored Projects

The best tools to bridge the gap between academic learning and professional practice are internships, cooperative education programs (co-ops), and industry-sponsored projects. The nature of these opportunities allows the design students to learn issues that are far more complex and satisfying than class assignments. They allow students to gain some practical experience while subjecting theoretical knowledge to practical tasks in the professional environment of their chosen design field (Shana & Abulibdeh, 2020). Such exposure allows students to sharpen their skills, gain a deeper grasp of what works in the industry, and have the ability to meet the high demands of the workplace. Extending the period of hands-on learning are co-op programs that allow students to spend semesters of study alternating with work at a company. They are especially useful for design students as they expose them to industry-specific projects. They are allowed to put in the shots and polish their design knowledge. Co-op placements also add to the long-term relationships and improve the job placement rates post-graduation as students are then given permanent positions upon completing their program.

Internships are extended beyond having students try and solve problems to incorporating students on active, ongoing projects where companies craft a project and then step back and allow the students to take over. Collaboration of this kind allows for the same to work on real design challenges facing companies to gain valuable experience in the process and give the companies brand new and unique perspectives and new and innovative solutions. Many students use these projects as portfolio pieces to demonstrate how to deal with real-world problems. Industry-sponsored projects also play an important role in making education relevant by keeping the education system up to date and aligned with the needs and expectations of the market (Chavan, 2022).

6.3 Developing an Advisory Board of Professionals to Keep Career Services Relevant

A career services advisory board can be a cornerstone in ensuring that the services offered provide the industry's most current offerings and trends. This board comprises seasoned experts from different design sectors (industrial design, product design, and UI/UX) to give directions and a viewpoint on refining career services and advising models. A number of these professionals can also offer career advisers useful data on the competencies and qualifications that employers are looking for, ensuring that their services align with the market. In addition to reviewing the institution's curriculum for its contextual relevance and emphasis on current methodologies, tools, and technologies, the advisory board's role is to provide advice for the upcoming curriculum. Involving industry experts in developing and revising

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course content enables institutions to develop more industry-relevant content that will aid in preparing students for the working world. Board members may also act as guest speakers, mentors, and advisors to students, making available themselves as experts in their fields to give career advice and assistance on placement and orientation, among other things. The advisory board can assist in industry-academia partnering to extend the potential applicability of each other's strengths (Malhotra et al., 2023). For example, the board can help facilitate meetings with companies that want to sponsor your students' projects, provide internships, or come to work with them for research. These connections ensure that career services are not theoretical but real-world experience and professional networks.

6.4 Best Practices for Networking and Relationship-Building between Students and Professionals

Being in the design industry means networking and relationship-building are the most crucial aspects of career growth. It is up to the students to be proactive in building professional networks to support them in achieving their desired careers. Organizing career fairs, guest speaker events and alumni meetings can encourage networking between institutions and industry leaders so that students can have face-to-face discussions. Events relating to jobs should not only bring the students a placement machine but also establish long-term links with them to enable them to support them in their career lives (Zhang et al., 2023). Students have to be trained in how to interact with professionals meaningfully. Career services can help with workshops on how to market yourself effectively in the form of an elevator pitch, how to follow up after a meeting, and how to convert the use of social media, in particular, to stay connected with others in the industry. The design student has to advocate for themselves and their work in a competitive job market. These skills are critical.

It does not need to be limited to formal events when establishing relationships with professionals. Building long-lasting contact is very important, too, as informal gatherings, mentorship programs, and exceptional groups are valuable. However, students should seek mentors who can offer reassurance and help during difficult times, give industry advice, and dispense advice at critical career junctures. Similarly, alum networks are not well exploited, but they can be an invaluable student resource. This network taps into that savings for students who can use it to access job leads, mentorship, and advice from those who have been there and walked the career path that the student is trying to navigate. Industry collaborations, partnerships with professionals, internships, co-ops, and advisory boards are the determining factors in making an effective career advising model for design students. By providing these skills, experience, and contacts, these initiatives allow students to prepare for a competitive job market. Any educational institution can then succeed in ensuring that its students will be well-prepared to meet the challenges of the professional design world (Raju, 2017).

7. SUCCESSFUL CASE STUDY: INDUSTRY-SPECIFIC CAREER ADVISING IN ACTION

Table 5: ***Case Study: Key Elements of Successful Career Advising Programs***

Element	Description	Example (RISD)
Industry Partnerships	Collaboration with top firms and companies	Collaborations with design firms, tech startups
Tailored Career Advising	Customizing support for each design field	Advisors specialize in Industrial, Product, UI/UX Design
Real-World Projects	Opportunities for students to work on live design projects	Student involvement in live design projects for industry partners

7.1 Overview of a Successful Career Advising Program in a Design Field

The Rhode Island School of Design (RISD) has a successful career advising program that works with top design firms and corporations. This program matches the industrial design, product design, students, and UI/UX design programs with industry professionals for mentoring and internships. The RISD Industry Partnership Program was created to

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ensure students receive top-tier, top-tier design education and the knowledge needed to display competency in a competitive business climate. By creating this partnership between the university and these leading design firms, tech companies, and startups, they have developed internships, co-op opportunities, and industry-led workshops. What makes the program particularly great is that it tailors its career advising to fit the needs of each design discipline. This program closes the gap between theoretical education and the design industry's needs by aligning the academic curriculum with the changing demands of the design industry. For companies, students can bring fresh perspectives while students gain insight into how their academic projects may transition and work as professional work.

7.2 Key Elements that Contributed to the Program's Success

The RISD Industry Partnership Program has succeeded partly because of many key elements. First and foremost, the program's basis is the network of partnerships with these design companies and tech corporations. Internships, mentorships, live projects, and networking opportunities for the students with industry leaders are not limited to just internships here. The second part of the program provides fairly personalized career advising based on the particular needs of that individual design discipline. The career advisers have special training in understanding the special needs of industrial design, product design, and UI UX. Their advisers supply bespoke advice geared to the specific skills and expectations of their field, whether they are working on portfolios, job applications, or industry placements (Karwa, 2024). As is common in such programs, real-world projects are integral to the program's success. The students are involved in live projects with industry partners, where they gain hands-on experience, but in school. The possible projects are from physical product design to digital user interface design, depending on the student's field. This exposure adds to the students' resumes and gives them tangible deliverables to demonstrate that they can deliver what the industry expects.

The program also plays a critical role in workshops and networking opportunities. Workshops on subjects such as design thinking, UX best practices, and innovation in industrial design are changing the lives of industry professionals. The workshops provide students with a chance to learn from the experience of some field professionals and network with potential employers. In addition, there are specific career fairs for design students who can meet with companies looking for talent. Continuous support and feedback are offered throughout the internships and projects. The ongoing guidance ensures that students are on the right track and making the correct changes whenever needed. Both the industry mentors and the academic supervisors provide constructive feedback to enable students to develop the required skills for the working world (Kumar, 2019).

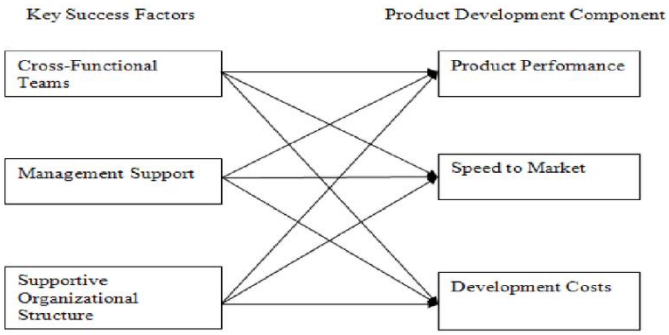

Figure 7: Relationship-of-key-success-factors-to-product-development-component

7.3 How Students Benefited from the Tailored Career Advising Model

The small group works of the RISD Industry Partnership Program have been enjoyed by students who have benefitted enormously from tailored career advising. Another point is that the approach to career development is highly personal, which I call a custom scale. Career advisers are right there to help students learn about their strengths, their personal goals regarding their chosen design field, and exactly what is required to become in that field of work. A UI/UX design aspirant would advise building a digital portfolio where interaction design and user experiences stand out. In contrast, in the case of a product design student, the focus will be on physical prototyping and product

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manufacturing processes. Students also access customized workshops and seminars that teach the latest skills in their chosen field (Simpson et al., 2017). For instance, students are invited to attend workshops about using AI for UI, as this aspect of UI/UX design becomes more AI-driven. These guarantees students stay competitive and up to date-in a constantly changing market.

It provides another key benefit in real-world exposure to design work. It allows students to train their knowledge in a professional setting. This practical experience strengthens their resumes and gives them better insight into their career options. Students tingling with the energy of the fast-paced design industry can be better prepared for it through working with industry mentors and on live projects. Additionally, through working with industry folks, students get helpful feedback that assists in sharpening skills. Industry mentors also share the latest trends and best practices with the students, which helps them stay ahead of the curve. Its current guidance is ongoing and ensures that students are not merely able to achieve standards but are also in a position to predict future trends and challenges.

7.4 Insights and Takeaways for Implementing Similar Models in Other Institutions

Several valuable insights are provided into implementing any institution's industry-specific career advising model similar to the RISD Industry Partnership Program. Their first takeaway is to establish a strong industry relationship very early. Building partnerships with leading design firms, tech companies, and other related industries is particularly important in facilitating students with valuable opportunities (Watters et al., 2016). Universities should concentrate on establishing strong, long-standing connections between students and companies. One of the most important lessons is to tailor career services for different design disciplines. Regardless of the design field, such as Industrial Design, Product Design, or UI/UX, there are other particular skills, job expectations, and market trends. To ensure these distinctions matter when students receive career advice, they should be considered when determining what will be the most appropriate and helpful for them (Nyati, 2018).

Institutions should prioritize giving student's real projects. These projects help students get practical experience and allow them to work in a professional environment. Real experience in the design field helps students, whether through internships, co-op programs, or industry partnerships. Continuous support and feedback from academics and industry professionals will help the students develop their careers. Universities can encourage taking on a culture where aspiring students improve through mentorship, constructive feedback, and other changes before they are ripe for decent careers. By adopting these strategies, other institutions will enable their students to get the tools, experience, and support that they need to be successful in the competitive design job market. These tailored career advising models will provide the university with better ways of preparing their students for success in their design fields.

8. BEST PRACTICES FOR CAREER ADVISING IN DESIGN FIELDS

As the design industries are going through creative and exciting changes, career advising has to reactively and proactively help students with the specific needs of a design career. For industrial design, product design, and UI/UX career advice to be successful, it is not just about job placement. Career advisers can help a design student to perfectly prepare for the challenges of the design job market by focusing on continuous skill development, real-world projects, soft skills training, alum networks, and diversity.

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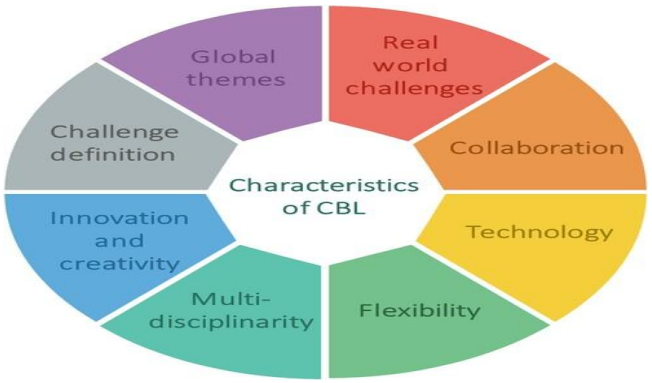

Figure 8: Characteristics of CBL

8.1 Emphasising Continuous Skill Development and Lifelong Learning

In any design discipline, being relevant and sustainable in the job market is critical, which is why continual skill development is critical. As the world of design continues to become more specialized, and with technological advancements happening rapidly, a person is always advised to continuously develop his or her skills. For example, Product Designers and Industrial Designers are also likely to need to work with more advanced CAD tools, digital fabrication methods, and increasingly with 3D printing technologies, as well as UI/UX professionals who are increasingly called upon to keep up with new trends, design frameworks and tools (such as Figma or Sketch). Certification in emerging technologies and design tools will help the students, but advisers should advise the students to get such certifications. Platforms such as Coursera, LinkedIn Learning, or industry-based institutes (Interaction Design Foundation for UI/UX) provide ample opportunity to ramp up your skills on online courses, webinars, and workshops. In addition, career advisers should create a culture whereby students always believe they must keep their portfolios updated, even after they start working in their professions (Tull et al., 2023). A successful learning mindset throughout their lifetimes will equip students with the most up-to-date business software skills and put them in a good position for career progression when anticipated changes in the design industry happen.

8.2 Offering Real-World Projects, Industry Simulations, and Portfolio Reviews

Career advisers should facilitate real-world environments for design students to work on actual industry projects or simulations. These hands-on experiences are invaluable in bridging academic learning and required tasks at work. Collaborations with industry, local design firms, or non-profit organizations allow students to work out something in practice and thus be more attractive to employers. An additional benefit of industry simulations is that they allow students to prepare for the pressures and expectations experienced in actual work environments (Shaw, 2024). The range of the simulations goes from design sprints to project management scenarios, similar to how design work is done in the professional world. Career advisers have a great chance to give students a chance to participate in these activities, which not only improves their practical skills but also allows them to develop critical thinking and problem-solving capabilities that students will use in their future careers.

Portfolio reviews are also equally important. As with most aspects of the design industry, a good portfolio is often the most powerful tool for getting a job, so to get hired, students need industry professionals to give feedback on their portfolios. Portfolio review sessions should be organized by advisers with experts in various design fields to assist the students in refining and improving their work. Constructive feedback ensures the portfolio meets today's industry standards and adds what needs improvement in the student's strengths (Renwick, 2017). These reviews also contain valuable information on what kind of work a future employer is interested in, allowing students to better compete for a job (Singh, 2022).

8.3 Facilitating Soft Skills Training (e.g., Communication, Teamwork, and Problem-Solving) for Design Students

Soft skills are also paramount as they can play a positive role in your career in design fields. As a result, career advisers must ensure that students not only have the capabilities to use design tools but also can work well in team

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environments, communicate ideas, and solve complex design problems. Such skills are important for success in the design workplace as design professionals usually utilize cross-functional teams and have to present their ideas to clients, stakeholders, and other colleagues. Soft skills training focused on communication, teamwork, and problem-solving should be facilitated by career advisers. For instance, the students should be trained to develop design ideas with full confidence and clarity to express themselves equally through verbal and visual communication techniques. Teamwork exercises allow students to learn how to work properly with others like engineers, marketers, and product managers, something widely used in design projects (Dominguez et al., 2022). Activities, including problem-solving in design challenges or brainstorming sessions that require students to think creatively rather than by thinking by facing the problem directly, are highly valued by employers in all design industries. Students can also practice their communication and presentation skills through mock interviews and presentation sessions organized by the advisers. These exercises will allow students to become more comfortable expressing their opinions and give them feedback on their communication style and how they approach the students for the real job interview.

Figure 9: ***career-in-design***

8.4 Building a Strong Alumni Network to Support Current Students

One of the best practices to help students traverse their pathway to a career is using the peppered experience and success of the alums. A strong alum network also offers current students access to mentors, industry contacts, and career guidance. The networks developed in career development are a resource for students throughout their careers, and career advisers should actively cultivate and maintain them. They can pass on their insights on the job market, specific industries, and often with their jobs or internships at these companies that they were in. Advisers can link students and the professional world through Career Advising practices such as guest lectures, networking events, and panel discussions where alums engage students in such activities. Alums can also give students real-world perspectives on the challenges and the rewards of being in design fields to give a better perspective on what is in store for them upon graduation. Alumni are also another powerful tool for student job referrals and collaboration. Alumni must be advised to have regular contact with students and encouraged to help students make relationships with industry professionals through career events like job fairs and networking mixers (Singh, 2022).

8.5 Encouraging Diversity and Inclusion in Career Advising

Diversity and inclusion should also be included in career advising for design students. Like other industries, diversity makes a difference in the design industry by bringing in new, more innovative, creative solutions. For all students, regardless of background, to succeed as designers in an equally fair playing field, advisers must proactively push for diversity and identity inclusion in their career advising models. To start encouraging diversity, it is mandatory to create an inclusive advising environment where all students feel valued and supported. Advisers' training should enable them to recognize and address biases and provide tailored guidance to students from underrepresented communities in the design, including minority communities. Career advisers can also help students contact organizations and initiatives helping design industry diversity in mentoring programs or scholarships limited to minorities (Packard & Fortenberry, 2023). The inclusive aspect of career advising also includes recognizing the quite distinct challenges presented to students with disabilities, students from poor economic backgrounds, and international students. Career advisers can provide tailored support and resources to facilitate these students' overcoming of obstacles and successful placement in the design job market.

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9. FUTURE TRENDS IN DESIGN CAREER ADVISING: PREPARING STUDENTS FOR TOMORROW'S JOB MARKET

LinkedIn users of the year established themselves through design, but the technological developments and changes in work dynamics have constantly evolved the world of design careers. With industries altering as time goes on, models for career advising of design students need to change to prepare them for the evolving trends that will define their future employment possibilities.

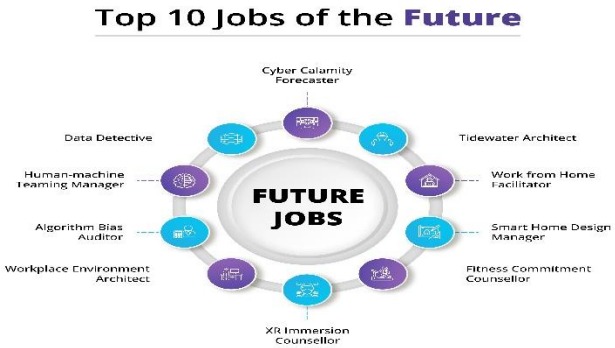

Figure 10: Top 10 Jobs of the Future

9.1 Impact of Emerging Technologies (AI, VR, and AR) on Design Job Markets

The emerging new technologies with immense prospects are Artificial Intelligence (AI), Virtual Reality (VR), and Augmented Reality (AR), which can bring radical changes in the design job market. These technologies also heavily influence designers' topics and methods, and, most importantly, they create non-meaningful unities and jobs in design that would not exist in the ordinary form. Thus, one needs to understand these technologies for career advising for design students to be able to prepare students psychologically for a digital-first world. AI automates design and specific tasks such as image editing, layout generation, and data analysis (Huang & Zheng, 2023). It gives designers the freedom to spend more time on creative problem-solving and conceptual design instead of tedious technical work. However, career advisers must educate students on using AI tools to boost their productivity and creativity, not frighten them of its automation threat. AI makes design workflows easier with tools such as Adobe Sensei. Students must keep up with those.

VR and AR are changing designers' working methods, notably in product design, industrial design, and UI/UX. These technologies allow designers to use them to produce immersive designs for clients, users, and stakeholders and open up a new design way of being interactive. Consequently, career advisers should specialize in VR and AR design principles to train students, as industries including gaming, architecture, and healthcare are looking for VR and AR professionals. This will be a key component of students' portfolios during the day, and it is important to understand how to integrate VR/AR into design processes (Karwa, 2024).

9.2 The Shift towards Remote Work and Its Implications for Design Students

The global pandemic has moved us towards the work-from-anywhere movement, which will likely be permanent to many, including design. That transformation should have enormous implications for design students (and all students preparing for careers in a distributed work environment). The career advisory must emphasize the essential skills for working remotely, including self-management, communication, and collaboration in virtual spaces. Remote work provides design professionals with greater flexibility and global access to the job market. The positive aspects of working from home, keeping in touch with teams across time zones, and dealing with loneliness in this type of work are accompanied by challenges. Career advisers should train students to deal with these challenges by providing training in remote collaboration tools (Slack, Trello, Figma) and enhancing their adaptability in digital communication. The extent of reliance on digital platforms for their work as designers is also increasing. Hence, students need to construct robust online portfolios and personal brands. Career advisers should emphasize creating and sustaining their online presence via platforms like LinkedIn, Behance, or personal websites (Dale, 2023).

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Furthermore, students should be instructed on how to display and work with clients remotely effectively so that students are seen as competitive, as many companies are becoming virtual.

9.3 The Growing Demand for Cross-Disciplinary Skills

The design job market is increasingly demanding a cross-disciplinary skill set. With industries adopting design, many are stepping into other fields of business of which design is a part, and there are expected design skills outside of traditional design skills. However, career advisers are forced to be proactive in teaching students' complementary skills so they can compete and meet the demands of the changing employers. One of the most dramatic is that a designer needs to have at least a working knowledge of coding and data analytics. Digitization brought forth the concept of UX/UI design and product design, and hence, learning basic programming languages such as HTML, CSS, JavaScript, and Python will be essential (Nabli, 2024). Designers must learn to take user data and interpret it to make data-driven decisions. Career advisers should encourage students to study courses or participate in coding and data analytics workshops in addition to their design skills. Technical skills are important now, but not so much as business acumen. Designers who grasp where their business is and is not in the market are more likely to succeed. Gaining business experience should be highlighted, as it should provide opportunities for students to work on real-world projects that require collaboration between students and business professionals.

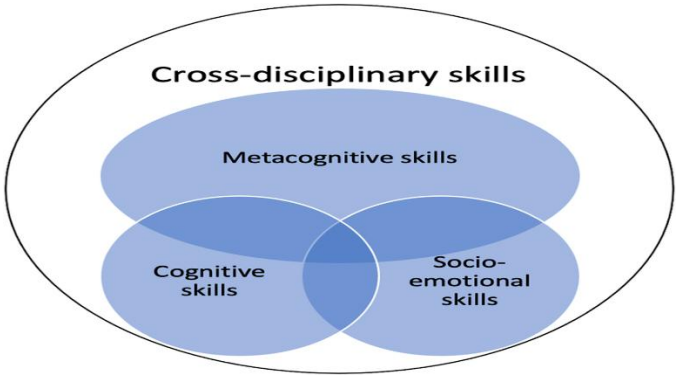

Figure 11: Modelling of cross-disciplinary skills.

9.4 Predicting the Future of Design Education and Career Advising in the Context of Industry Disruptions

Technological advancement, globalization, and changes in consumer needs are hastening the disruption of the design industry. Consequently, design education and career counseling must readapt to launch students into the challenges and opportunities ahead. One major disruption right now is how AI and machine learning will be integrated into the design workflow and how students should be trained (Hutson et al., 2022). The guidance career advisers need to give would need to change to help students remain agiler and open to design tools and practices that will continually evolve. The rise of digital platforms and the gig economy disrupts design professionals' career pathways. However, most designers are now choosing freelance or contractual work across many different industries. To achieve this, there is a need to adopt a new approach to career advising, starting from dealing with individual approaches to entrepreneurship, networking, and branding. Career advisers must teach students how to get a sustainable freelance career through resources such as negotiating contracts, managing clients, and marketing strategies (Karwa, 2024).

Lifelong learning is likely the future focus for design career advising. Professionals in any industry or role must do the same. They are accustomed to furthering their daily skills to keep up with their respective industries and technologies. Career advisers should advise students to ensure a mindset for continuous development, wherein they should always engage in ongoing education, attend workshops and conferences, and participate in online learning platforms. Understanding the trends, tools, and changes occurring in the workplace is important to preparing design students for tomorrow's job market (Ahmad, 2020). Educators can vicariously start by adapting career advising strategies to these new realities and giving students the tools they need to be successful in a volatile, rapidly changing design industry.

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10. CONCLUSION

Career advising needs to be updated to fit the needs and challenges of each design discipline, including Industrial Design, Product Design, and UI/UX. In the wake of ongoing technological advancements, globalization, and changing industry standards, the design job market keeps evolving, and career advisers should always suggest decent advice per each field's needs. No longer can one take a one-size-fits-all approach to career advising. Educators can accommodate advising models to better educate students for a job market that is competitive and dynamic with a view of customizing them. Key points raised in this article discuss the importance of each design discipline landscape. Different job roles, skill demands, and industry requirements of Industrial Design, Product Design, and UI/UX. Career my opinion, advising must also address these differences to equip students with the technical, creative, and soft skills to survive in their professional field. Such as proficiency in specialized software, familiarization with the market trends, and productivity in combined work with specialists from different professional fields.

Additionally, more technological trends, such as AI, VR, and AR, are completely transforming the design job market and bringing new job requirements and needs for cutting-edge expertise. A critical aspect of this is to keep career advising and the educational process updated for such technologies to inform students about their potential in a digitally driven world. Career advisers must teach students how these technologies can maximize their creativity and efficiency in the new landscape of the design industry and how to adjust to this. Future design career advice also entails a shift toward remote work, which has increased over the past few years. The advent of virtual collaboration and digital platforms has necessitated the need for design students to be able to work independently and handle their time. Advisers should recommend the growing use of digital tools for collaboration and building strong online portfolios in a remote work environment, as well as an effective communication strategy. Employees in the design industry are also beginning to expect cross-disciplinary skills in addition to technical skills. First, design students need not just to know about design principles but also how to code and analyze data and business strategies. Complementary skills that will help students enhance their chances in the job market and undertake different career options are played a major role by career advisers.

Since the design industry keeps changing, career advising models should also be capable of updating. Given this, educators and career advisers need to be proactive about identifying new trends and tend to include them in their frameworks of advising. Staying on top of industry disruptions, technological improvements, and social shifts is part of this so that students are prepared for a changing place of employment. A career advising model must be created with educators, career advisers, and industry professionals. These partnerships help the design market evolve and shape the world, as delivered through industry leaders with their sources for needs. They also provide advisers with real-world experiences through internships, co-ops, and industry-sponsored projects that reflect their employer's needs. Career advisers can strengthen the relationships between their advising models and what the industry wants, providing insights based on industry expectations. The real-life job market will call for design students to be prepared for the future job market, which requires the creation of tailored career advising models for design students. Aware of the special needs of each of the engineering design disciplines, using new technologies, and encouraging cross-discipline skills, career advisers gain the means of helping students prepare themselves for success. The design industry is always evolving, but so should career advising practices to be sure students are always ready to face what is to come.

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