Perspectives from Norwegian UX Professionals: What Should UX Education Include?

Hanne Sørum[1] and Miriam Eileen Nes Begnum[2]

[1] Kristiania University of Applied Sciences
[2] Norwegian Labour and Welfare Administration (NAV)
hanne.sorum@kristiania.no, miriam@begnum.no

Abstract. Norwegian user experience (UX) designers work across diverse organizational contexts that demand adaptability and interdisciplinary collaboration. This diversity highlights the need for UX education that reflects industry needs and expectations. The present study explores Norwegian UX practitioners' perspectives on the competencies graduates should possess when entering professional practice. Drawing on an online survey of 119 UX designers, quantitative and qualitative analyses are combined to examine practitioners' experiences and priorities. The findings identify key areas of knowledge, skills, and work practices considered important for successful UX work. By providing empirical insights into industry expectations, the study contributes knowledge that may inform the continued development of UX education.

Keywords: UX professionals · Design education · Practice-lead curriculum · Online survey · Norway

1 Introduction

User experience (UX) designers operate across a wide range of organizations - from large private enterprises and the public sector to consultancies and industry startups. They routinely collaborate with developers, product managers, lawyers, user representatives and other stakeholders, applying human-centered methods and strategic awareness. In light of this, the present study examines Norwegian UX designers' ways of working and perspectives on the knowledge and skills graduates should possess. By highlighting practitioner insights, this research aims to identify competencies that enable new graduates to be prepared for and able to adapt to diverse types of organizations and business fields. Consequently, we ask the following research question: *Based on industry perspectives, what competencies should UX education include to prepare graduates for professional practice?*

To provide an answer, we draw on empirical data collected through an online survey of UX designers (n = 119) in Norway. Both qualitative and quantitative data are collected and analyzed. Combined, they provide unique insights into practitioners' views and experiences. The specific job title of a UX practitioner often depends on the employing organization and the nature of the work [10].

Norwegian UX practitioners may be titled, e.g. UX designer, interaction designer, product designer, design researcher, service designer or content designer [6]. For the purposes of this study, we adopt *UX designer* as an umbrella term encompassing the working activities related to gathering insights and design content, systems and services across diverse user interfaces.

Please note that the findings presented for NIKT 2026 (Track: UDIT) represent only a subset of the data collected from UX designers in Norway. A more comprehensive analysis of the empirical material and its broader implications will be reported in forthcoming research.

2 Related Work

In Norway and internationally, design education is offered at both bachelor's and master's levels across a range of disciplines, including UX and interaction design, graphic and visual communication, industrial and product design, service design, and human-computer interaction. Norway currently offers multiple bachelor and master programs in UX and related fields [9]. Begnum et al. [1] analyzed Norwegian IxD programs in 2019 and identified five interaction designer archetypes, representing different types of UX/design specializations. Classic introductory literature from 2013 outlines that designers should understand technological possibilities and evaluate alternative designs – iterating until they arrive at a solution that fits users, their intended activities and context of use [2]. The need to understand people, technology, and business to create solutions that are useful, feasible, and viable is highlighted. UX design is viewed as an interdisciplinary field drawing on various expertise, among others visual design, product design, human–computer interaction, psychology and computer science [7]. Norwegian UX practitioners are perceived as needing creativity, analytical rigor, pragmatic problem-solving skills, empathic user understanding, and the ability to convert user insights into effective, usable solutions [5].

To better understand current expectations in the UX industry, Rose et al. conducted 64 interviews with 71 senior UX professionals [8]. The aim was to explore current practices and the specific skills that new employees need in order to succeed in UX roles. Findings from 2020 show that UX professionals should possess a wide set of knowledge across numerous technical skills, human skills and dispositions (character traits). Examples include visual design, business strategy, communication, collaboration, conflict management, and dispositions such as independence, open-mindedness, curiosity and passion. Winter and Stevens carried out 25 interviews with UX managers to examine what they regarded as the key competence characteristics of UX professionals [12]. Their 2024 results reveal that knowledge of common UX methods, theories, and tools alone is insufficient to meet industry expectations: UX professionals should be curious, passionate about creating improvements, and demonstrate adaptability, flexibility, honesty and reliability, while remaining open to feedback and new ideas.

Consequently, previous studies suggest that UX designers require a broad and diverse set of characteristics, competencies, and skills.

3 Method

An online survey was conducted among UX designers in Norway between December 2025 and January 2026. We used the online survey tool *Nettskjema* to collect data. The survey explored designers' work practices, required competencies, and perspectives on UX education. Participation was voluntary and anonymous, and respondents provided informed consent before participation. The questionnaire consisted of 17 items, including both closed and open-ended questions, and five pilot tests were conducted before distribution. This study analyzes questions related to working practices, educational needs, designer characteristics, and participant background.

The survey was distributed through professional networks, primarily LinkedIn and design communities, resulting in 119 complete responses. As recruitment occurred through open professional channels, the sample should be considered a convenience sample. A mixed-methods approach was employed. Quantitative data were analyzed using descriptive statistics, while qualitative responses were analyzed through inductive thematic analysis following Braun and Clarke's six-phase approach [3]. The sample consisted primarily of experienced UX professionals, with respondents representing a variety of design specializations and both public and private sector organizations. While the sample provides valuable insights into contemporary UX practice, the use of convenience sampling and voluntary participation limits the generalizability of the findings. Furthermore, the results reflect participants' perceptions and experiences rather than observed professional practice.

Most respondents (69.7%) had more than five years of UX-related experience, and approximately 85% were between 25 and 44 years old. Participants represented a broad range of UX specializations, including design research (88.2%), interaction design (88.2%), strategic design (54.6%), service design (53.8%), visual design (51.3%), and content design (37.0%). Respondents were employed across both the private (59.7%) and public (37.8%) sectors, with a small proportion (2.5%) working in other sectors.

The findings should be interpreted in light of several limitations. The survey used a convenience sample, skewed toward experienced practitioners. In addition, the results reflect self-reported perceptions rather than observed practice.

4 Findings

This section presents the study's findings on designers' ways of working, views on UX education, and professional traits, drawing on both quantitative and qualitative data.

4.1 Inside UX Ways of Working

To get a basic understanding of the contexts framing the UX work, we ask respondents whether their work is primarily project-driven or product-oriented,

and about the balance between maintenance and innovation activities. Project-driven work is described in the survey's instructional text as temporary and tied to a specific deliverable with a fixed end date, while product-oriented work is characterized by stable teams assigned responsibility for solving problems and finding strategic opportunities. Participants were asked to rate their work on a seven-point scale (1 = project-driven, 7 = product-oriented), with 4 as the midpoint. The results show a clear tendency toward product-oriented ways of working: the median was 6, and the mean was 5.20 (see Figure 1).

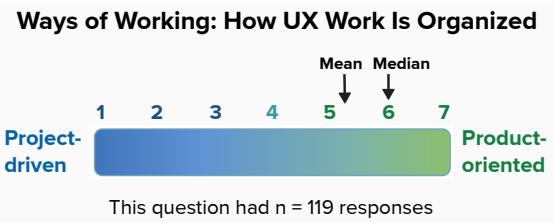


Fig. 1. Distribution of responses on Project-driven vs. Product-oriented UX practice.

Most participants selected values at the higher end of the scale, with ratings of 6 (30.3%) and 7 (26.9%) being the most common. Lower ratings (1-3) were comparatively uncommon, accounting for only 18.5% of the responses.

We further examine whether designers spend most of their time on maintenance work or innovation work, defining in the survey's instructional text that *maintenance* covers upgrades, bug fixes, and other ongoing tasks that preserve existing value; while *innovation* refers to development aimed at strategic goals such as improving solutions, expanding functionality, or improving customer satisfaction. The respondents rated their work on the same 1–7 scale (1 = maintenance work, 7 = innovation work), with 4 as the midpoint. The findings show a median of 5 and an average of 4.8 (see Figure 2).

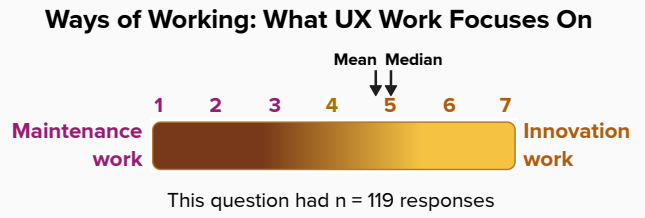


Fig. 2. Distribution of responses on Maintenance work vs. Innovation work.

The numbers indicate a tendency towards innovative and strategic work over maintenance. Most respondents place themselves at 5 or 6 on the seven-point

scale, while relatively few report primarily maintenance-focused or exclusively innovation-focused work. However, the findings also show that 20% of respondents selected the midpoint of the scale (4), which can represent both types of work. Overall, the results suggest a moderate tendency toward innovative and strategic work rather than maintenance-focused tasks.

4.2 Industry Perspectives on What UX Education Should Cover

Next, the respondents were asked which topics UX education should cover and which skills they considered most important for preparing students for professional practice. Based on a qualitative analysis of responses to this question (n = 83), four main themes emerged: business understanding (n = 35), interdisciplinary collaboration (n = 23), technical understanding (n = 20), and practical training (n = 20). The key findings from each theme are briefly outlined below.

Business understanding (42%): Respondents emphasized the importance of understanding business and strategic considerations in UX practice. Such knowledge was considered particularly valuable when communicating with clients and other stakeholders. They highlighted the need to assess the cost-benefit implications of product development and to align UX strategies with broader business objectives.

Interdisciplinary collaboration (28%): Interdisciplinary collaboration, especially within agile team processes, is also important knowledge that is frequently mentioned by the respondents. The focus is on interdisciplinary communication in teams where the participants have different skills and roles.

Technical understanding (24%): A basic understanding of technology and programming was also highlighted as beneficial, particularly for facilitating collaboration with developers in interdisciplinary teams.

Practical training (24%): The importance of providing students with sufficient practical training in design methods was also emphasized. These remarks partly overlap with the need to understand industry best practices and interdisciplinary collaboration.

Other topics (18%): The importance of providing students with sufficient hands-on experience in the methods and software commonly used in UX practice (for example, Figma). Different specific topics were also suggested, such as UX writing, universal design and ethical aspects related to design.

4.3 What Makes an Ideal UX Designer?

To explore professional identities, respondents were asked whether UX designers should possess specific personal traits. A large majority (88.8%) believed that they should, while only 11.2% did not. Those who answer "yes" are then presented with a follow-up question asking which personal characteristics they consider important for a UX designer.

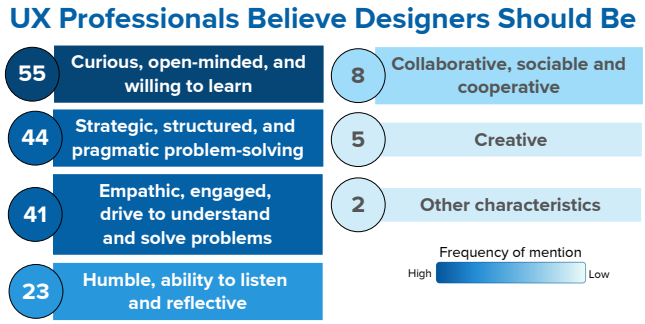


Fig. 3. Industry perspectives on the personal qualities of UX designers (n = 97). Frequency of mentions for each category is within the circles.

From Figure 3, we see that four main themes emerge from the data set (n = 97), reflecting four personal traits: 1) Curious, open-minded, and willing to learn (n = 55), 2) Strategic, structured, and pragmatic problem-solving (n = 44), 3) Empathic, engaged, with a drive to understand and solve problems (n = 41), and 4) Humble, ability to listen and reflective (n = 23). The main findings that emerged are briefly outlined below.

Curious, open-minded, and willing to learn (57%): Respondents emphasize the importance of UX designers being curious and exercising empathy in both a critical and open-minded manner, eager to understand. Some participants state that being extroverted and talkative might be beneficial towards this end, but it is the openness and listening skills that are highlighted as the more critical attributes.

Strategic, structured, and pragmatic problem-solving (45%): The second most frequently mentioned emerging theme is that of being strategic, structured, and tactical. Here, the respondents attach these personality traits to being bold and resilient, but also to being solution-oriented, pragmatic, and adaptable.

Empathic, engaged, with a drive to understand and solve problems (42%): Empathy is a further personal characteristic frequently mentioned. Attached to empathy and the ability to understand other people, are traits related to being idealistic, engaged and striving to solve issues and contribute positively to users and stakeholders' needs.

Humble, ability to listen and reflective (28%): Being humble, a good listener, receptive to input from other stakeholders and disciplines, and willing to reflect on and change one's own stance appears to be an intertwined characteristic.

In addition, several categories were mentioned less frequently: **Collaborative, sociable and cooperative (8%):** Eight respondents mention cooperative skills; being sociable and collaborative.

Creative (5%): Interestingly, of the 97 responses, only five respondents mentioned creativity (and only one mentioned aesthetic sensibility). This may be surprising for non-designers, as being creative and placing aesthetics over function may be common stereotypical perceptions of designers.

Other characteristics (2%): Four out of the 97 responses did not fit any of the above described themes.

5 Discussion

Our findings show that the majority of our respondents work in product-oriented settings. Findings further suggest their work generally leans towards innovation-oriented work seeking new and strategic opportunities, while still balancing this with ongoing maintenance activities upholding product value. Their work appears agile and interdisciplinary, iterating between discovering viable opportunities for increased value and delivering, scaling and operating product solutions [11, 4]. When asked about their perspectives towards UX education, Norwegian UX professionals think students should learn more about business perspectives and strategic aspects, including communication with stakeholders and understanding development processes (42%). Our interpretation of the responses is that they emphasize the importance of understanding how designers can influence strategic decisions and product innovation. These competencies and perspectives are not frequently and explicitly mentioned in the literature as necessary for designers; however, Nordbø [5] highlight business viability and Rose et al. [8] mention business strategy as knowledge UX professionals should possess. The Okse survey found that demonstrating the value of design to stakeholders is a key challenge for designers [6].

Moreover, 28% of the participants emphasized the importance of understanding the designer's role within interdisciplinary collaboration and agile ways of working. This focus on agile methodology and the role of the UX professional versus the role of other disciplines is somewhat reflected in related literature [8], but emphasized more as human skills and character traits than as methodological insights and know-how. The importance of adaptability aligns with findings from Winter and Stevens [12]; knowing and being able to apply common UX methods, theories, and tools is not sufficient – UX professionals also need to demonstrate adaptability and flexibility. It is worth noting that Winter and Stevens report from the perspectives of the *managers* of UX professionals, while our study reflects insights from UX *designers*. Despite these different perspectives, both studies highlight adaptability as a key competency for UX professionals, suggesting broad agreement across organizational and practitioner viewpoints.

Most of the respondents agreed that UX designers should have specific personal characteristics, particularly being curious and open to learning, strategic problem-solvers, empathic, and reflective. Our findings regarding the key characteristics of UX designers are largely consistent with previous research, in particular emphasizing open-mindedness and curiosity [12, 8], demonstrate adaptability (flexibility) and problem solving skills [6, 12, 5], and being empathic and pas-

sionate about creating improvements [5, 12, 8]. Interestingly, creativity was not identified as a key UX trait, despite its frequent association with design-related professions.

Finally, 24% of participants emphasized the importance of providing students with sufficient practical training in design methods. Our respondents express the value of being able to move between shifting perspectives and modes of working: from user needs, details and product value maintenance focus to business needs, the big picture and strategic innovations to seek new opportunities. Providing students with opportunities to adapt methods and processes to different problem contexts, combined with structured reflection guided by lectures, appears to be a promising approach for preparing graduates for professional practice.

6 Conclusion

This study adopts a practitioner perspective to explore the competencies that UX education should cover to prepare graduates for professional practice. To address this, designers from a range of sectors and work settings were surveyed. The findings contribute to the body of research by providing a broader perspective on contemporary UX practice and its implications for education, particularly concerning professional ways of working and the competencies considered important for UX practitioners in Norway.

Though much of our findings overlap with related research, we find that strategic competencies are emphasized more among our participants. Moreover, they highlight the importance of being curious and open-minded when presenting ideas and of adapting design solutions based on feedback from stakeholders and users. The findings further indicate that UX education should address business understanding, interdisciplinary collaboration, technological knowledge, and practical training, as these competencies are considered important for professional UX practice.

Building on the present study, future research could examine the alignment between UX education programs in Norway and the competencies highlighted by practitioners. This may include analyses of curricula, course content, and overarching learning outcomes to evaluate how these programs support the development of industry-relevant competencies.

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