

Learning by failing

panie co to
jest?

W edukacji projektowania wiodącym obecnie konceptem jest uczenie się przez doświadczenie, czyli learning by doing. Uważam jednak, że w kreatywnym fachu nie można doświadczyć nic piękniejszego niż dysonansu poznawczego, a ten nierzadko uzyskuje się przez porażkę. Stąd postuluję nowy-stary koncept uczenia się projektowania: learning by failing!

As part of the design education project, this text focuses on three key areas and their dynamics within the field of design education.

Design education today faces challenges - if it wants to maintain its subjectivity in the higher education market - it should try to seek answers in the form of new, experimental forms of education, decentralisation of know-how to non-design fields and disciplines, and concentration on the challenges related to the VUCA reality. "Too many schools believe their own advertising" (Frascara 2021). It should be noted here that the growing complexity on the way to the professionalisation of entire industries and market sectors - redundancy of processes, procedures and standards is becoming a new organisational reality. Problems emerging due to increasing complexity require a systemic, systematic and methodical approach to solving them - more than design skills alone in the sense that a formal workshop is needed; there is a need for strategic planning and precise communication of changes. Also, the dynamics of technological changes and the decreasing validity of solutions based on modern technologies introduce methods and tools drawn directly from design thinking to non-design market areas - digitisation of the so-called everyday social life in the form of enabling the fulfilment of basic needs via the Internet entails challenges related to the availability of resources, accessibility of solutions and the widespread use of them - a prominent example is, among others, design instrumentation of the legal sector (legal design). Designers increasingly often - often on their own - have to expand their range of competencies, knowledge and skills to include issues from the field of social sciences and humanities - understanding the way people function in society becomes a fundamental challenge and often an insurmountable barrier for people with education from art schools. Expanding the scope of knowledge relevant to design practice allows for linking systems and paradigms at the intersection of which an active environment for innovation appears. Hence, we are close to isolating and institutionalising new transdisciplinary forms of educating change designers. For this change to be possible, however, it is essential to understand the dynamics of change and the changing role of the academic teacher and the student in three areas critical for design education:

1. The area of tools and technologies
2. The area of the user and his surroundings
3. Methodology area

The area of tools and technologies is - although wrong in my opinion - the most crucial point of reference in formal design education, from propaedeutics through design workshops to modern technologies to provide the desired form. It is not difficult to guess that the area of tools and technologies is characterised by the most significant dynamics of change in all three areas. Every day, we learn about innovations that do not change design as such but change the narrative about design. The high dynamics of changes in tools and technologies determine the role of an academic teacher and a student. In the case of a visionary teacher, the essential task is to support critical thinking and develop a culture of active feedback - it is not the academic teacher's task to follow technological innovations because this race is pointless and doomed to failure even before stepping on the treadmill. Building a creative attitude by encouraging the student to experiment with tools becomes an essential task, allowing, on the one hand, the use of the commonly known learning by doing didactics while releasing and accepting the learning by failing approach. The role of a student in the area of high dynamics of technological and tool changes comes down to what Karl Jaspers wrote about in the book "The Idea of the University": "Curiosity is primitive: a primitive desire to see what is unknown, to hear about experiences and results" (Jaspers 2021). Updating knowledge and skills is a fundamental point of reference in the educational process while at the same time assuming, which results directly from constructivist didactics, that there is no knowledge independent of the observer.

The area of the user and his environment mainly describes the categories of culture, society, communication, and language. The recipient of design becomes the main object of empirical knowledge in the design process and the primary addressee of subsequent solutions, as evidenced by the multitude of socially oriented design doctrines. Although it may seem surprising, the dynamics of change in this area are relatively weak - people change slower than we would expect due to generational comparability (generations X, Y, Z) or lifestyle. Although language changes, just like culture and communication, it is a stable construct that allows us to orient ourselves in the world of codes, signs, and brands - communication in general. "The limits of my language mean the limits of my world.". In this situation, the role of an academic teacher comes down to building a scientific attitude, supporting cognitive processes, empiricism and context control through non-judgmental observation, which means "the ability to get rid of one's valuations in favour of objective knowledge, giving up one's position and one's current "willingness for an unbiased analysis of facts". Since the design process is based on the analysis process, i.e. collecting, categorising and drawing conclusions based on specific questions and research goals, the role of the student is primarily to explore the resources of knowledge, observations and research as broadly as possible (divergent thinking). Effective design also considers an in-depth study of the recipient and their surroundings while searching for resilient solutions.

Both the area of tools and technologies and the user and his environment require a clear and transparent way of organising work in design. This is what I mean by methodology area, which connects all design activities and their context into a logical sequence of events. Although the literature on the subject offers a rich synonymisation of design methods, at the end of the day, these are synonyms for the logic of the design process defined in the 1960s, within which research → strategic planning → creation → testing → implementation → control takes place. This area is contained from the point of view of the dynamics of change. However, today, like never before, design students need to acquire a solid, critical understanding of design methodology rather than proficiency using a few tools for a specific application". The role of an academic teacher in educating future designers is crucial here and comes down to securing the (design) transition process - we are responsible for ensuring that students, with persistence worthy of a better cause, do not take shortcuts, that they trust a transparent and logical work method - that experimented in a design work environment that was safe in terms of controlling the effects, and finally, that they were aware of design decisions based on research results and strategic assumptions of the project - enough of chance and artistic chaos, one might say. It is easy to guess that the role of the student is to follow a specific design methodology. Taking into account the three areas of application of design education and their various dynamics, it seems that the future of design education lies in the change from the classical-formal concept of education to the education of attitudes - in this world, specifically, the two most important ones: the scientific attitude and the creative attitude. With a scientific attitude, I understand the readiness to acquire knowledge, curiosity, and openness to criticism independently. In contrast, a creative attitude is understood as the ability to see the world in terms of possibilities and the readiness to use them. Although there is no single recipe for good design, there is one recipe: the cooler the head (scientific attitude), the warmer the heart (creative attitude).