



Transdisciplinary Higher Education: Addressing Real-World Challenges Beyond Disciplinary Boundaries

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1. Background of the School for Transdisciplinary Studies (STS)

STS increases the visibility of inter-/transdisciplinary teaching at UZH

- Modern day's societies are confronted with major challenges
 - → University education is increasingly unable to stay within historically developed disciplinary boundaries
 - → Many initiatives and teams at UZH address such challenges in their research inter-/transdisciplinarily
- At UZH, STS acts as a hub between faculties and inter-/transdisciplinary initiatives
 - → Inter-/transdisciplinary courses are made available via STS
 - → STS courses complement regular study programs

Mission statement: https://www.sts.uzh.ch/en/About-us/Mission-statement.html



STS milestones: from its foundation to a look ahead

June - December 2020 Implementation project to establish STS as a hub for inter-/transdisciplinary courses and a connection between faculties and initiatives From fall semester 2023/24 Expansion of the portfolio with the DSI minor study program "Digital Skills". Further minors are planned.

March 2020

Executive Board's resolution to implement and operate STS on a permanent basis.

January 2021

Start of operating phase:

STS has been hosting courses since spring semester 2021 and is continuously expanding its portfolio.

- Spring semester 2021: 5 courses; 123 students
- Fall semester 2023: 34 courses; over 1'000 bookings





2. Courses Illustrating Transdisciplinary Practices and Approaches



Mentoring for the Next Generation

- Students support a socially disadvantaged child to better cope with the challenges in school and everyday life
- The students are coached by practice partners from established educational initiatives in Switzerland
- Theoretical part of the course: students learn about the impact and challenges of civic engagement on a societal, personal and economic level
- Professors from three different dsiciplines: Business Economics,
 Psychology, Sociology

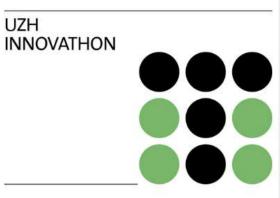


Link to Course Catalogue (German only)



Innovathon: The Digitalization of Mobility

- Students and teachers from various faculties tackle the complex challenges of the digitalization of mobility
- Students
 - > address challenges posed by practice partners
 - develop innovative solutions in a "design sprint"-format; solutions are pitched to a jury and the best teams win a prize
- Hands-on program



Link to Course Catalogue



Study Week: Sustainable Development and Transformation

- Centers around sustainable development and transformation
- Students
 - > engage in real-world projects through a multi-stakeholder process
 - ➤ learn to integrate knowledge from various fields and develop strategies for sustainability goals at local and global levels
 - > collaborate with diverse peers on case studies provided by practice partners, who also act as coaches



Link to Course Catalogue (German only)



3. Benefits and Challenges of Transdisciplinary Higher Education



Benefits

For students

- Holistic problem-solving
- Interdisciplinary collaboration
- Fostering critical thinking
- Insights from dedicated UZH instructors and practice partners
- Unique educational experience that sets students apart from their peers and opens doors to exciting career opportunities

For teaching staff

- Interdisciplinary collaboration
- Visibility and profiling as experts
- Innovative teaching methods
- Professionalization and networking

Challenges

Institutional Challenges

- Credit Transfer Eligibility
- Transdisciplinary collaboration
- Different terminologies, methodologies and epistemologies

Challenges within the courses

- Heterogeneous students
 - Varying prior knowledge
 - Communication barriers
 - Different learning styles and approaches to problem solving
 - Time management and schedule conflicts (different schedules due to different study programmes)



4. Strategies to Meet the Challenges of Transdisciplinary Higher Education



Problem-solving strategies

Institutional Challenges

- Credit Transfer Eligibility
- Transdisciplinary collaboration
- Different terminologies, methodologies and epistemologies
- Challenges within the courses
- Heterogeneous students
 - Varying prior knowledge
 - Communication barriers
 - Different learning styles and approaches to problem solving
 - Time management and schedule conflicts (different schedules due to different study programmes)

- Institutional support (eg. establishing transdisciplinary units or centers)
- Fostering faculty and student collaboration
 (e.g. provide platforms for sharing
 experiences and best practices)
- Creating a common foundation
- Fostering inclusive communication
- Team-based learning
- Assessing for diverse outcomes
- Regular feedback and reflection
- Transparency about objectives and expectations
- Flexible course design
- Support resources



5. Lessons Learned and Conclusion



Take-home Message and Reflection

- Through our experience, we have observed that transdisciplinary practices and approaches to learning and teaching are desired, but not easy to implement at a comprehensive university.
- Building bridges between disciplines is proving to be a challenge.
- Nevertheless, since its establishment in 2021, the School for Transdisciplinary Studies has sought to promote inter- and transdisciplinary learning and teaching by supporting coordination and collaboration among the different faculties at UZH.

→ Planning and teaching inter- and transdisciplinary courses require (more) time and effort. What motivates teaching staff and course managers to walk the extra mile?



6. Questions for Discussion



Questions for Discussion

- The EUA's vision for 2030 aims for "Universities without walls". This aim should start within the university itself: What strategies can be applied, even on a small scale, to break through disciplinary boundaries, share and co-create knowledge, and enable students to develop a holistic approach throughout their studies?
- What other challenges of transdisciplinary higher education do conference participants face in their work?
- Would you like to come forward with your experiences with (or good practices of) cross-faculty cocreation and student collaboration in interdisciplinary programme development?