

ASPIRE (192-007)

Graasp for Open Evidence-Based Research in Digital Education

Graasp is an open-access, GDPR-compliant cloud platform for digital education developed and hosted at EPFL in the framework of national initiatives (SWITCH-AAA-**PLE**), as well as European integrated projects (FP7) and innovation actions (H2020) as part of the Go-Lab initiative (**Go-Lab**, **Next-Lab**, and **GO-GA**). It is exploited worldwide by universities and schools for blended active learning or digital knowledge sharing and has currently over 165'000 users. A driving feature of the platform is that—provided consent—it is possible to collect data regarding teacher and student interactions within online learning spaces and with digital learning resources (learning analytics), which can be used not only for pedagogical awareness and reflection but also for evidence-based research. Our vision is to empower researchers, beyond the current platform stakeholders, to access data generated within Graasp. To this end, we intend to build a set of additional findable, accessible, interoperable, and re-usable (**FAIR**) services, which will notably include (1) a way to bootstrap new translational research studies by connecting teachers and researchers inside Graasp, (2) a tool for research-oriented consent management, (3) a tool to automate checks for data anonymity, (4) an interactive, open data repository to expose to researchers the data collected in the platform and any related resources, and (5) a standard and straightforward way to produce and share open data visualizations and analytics. We also envision to encapsulate these core open data services into a plug-in that could be installed in other educational and knowledge sharing platforms, gathering data from a larger digital education ecosystem and benefiting an even larger community of researchers.

This project broadens the scope of the current strategic Swiss and European initiatives on **open digital education**, e.g. the Go-Lab initiative mentioned above, to the emerging and also strategic Swiss and European initiatives on **open science** and especially **open data**, strengthening as such the international leadership of Switzerland in these areas. Targeted research communities include not only education, digital education, and human computer interaction, but also information systems and knowledge management. Both the open data and open education dimensions tackled in this project through the Graasp **platform** and open data **services** are paving the way for the upcoming swissuniversities open science 2021-2024 programme.

The project will be carried out collaboratively by EPFL (Vaud, with satellites in Geneva, Neuchâtel, Wallis, and Fribourg), HEIA-FR (Fribourg), and HEP-BEJUNE (Bern, Jura, Neuchâtel) covering as such 7 cantons and two linguistic Swiss areas in the swissuniversities spirit and to facilitate a national-wide adoption. In addition, the project combines research competencies in human computer interaction, software engineering, data science, and education.