On the Status of Geodetic Education in Germany during the COVID-19 Pandemic

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SUMMARY

The professional association ‘German Association of Surveying – Society for Geodesy, Geoinformation and Land Management (DVW)’ has the main objective to promote and to elevate the diverse and complex field of surveying as well as related sciences in general. Its working group 1 (WG1) is focussing on profession and education. In order to gather representative and meaningful insights into the effects of the first wave (March-July 2020) of the COVID-19 pandemic, WG1 carried out an extensive online survey (approx. 1,500 participants, 25 questions) on the geodesy-related education system in Germany. This education system is divided into (i) dual education and (ii) higher education. The dual education system combines apprenticeships in a company and vocational education at a vocational school, while higher education is carried out at universities. Both career paths as well as the individual professional development ‘legal traineeship for geo-spatial authoritative positions’ were taken into account in the survey. As the geodetic education is carried out in classical classroom settings and intensive practical training, significant impact by the COVID-19 pandemic were expected, due to government regulations and further guidelines of the educational institutions especially.

Within the paper, the database of the online survey is described in detail. The design of the survey enables to distinguish between the perspectives of teachers and students. For this purpose we compare their perceptions regarding for example working from home, communication processes, teaching and learning settings, completeness of education programs as well as level of satisfaction and exams to assess the effect of the COVID-19 pandemic.

In contrast to well-planned online teaching the current strategy of education systems with respect to COVID-19 is described as emergency remote teaching. Besides important conclusions regarding recent experiences of emergency remote teaching, COVID-19 significantly supported the further
development of e-learning for instance through the digitization of teaching as well as learning processes. Hence the online survey focused on the future of teaching and learning, aiming to present the individual views of the participants on this future-oriented change process.