

Geospatial information – advanced education and competence needs



- Required geospatial competences – voices from actors
- Education alignment with competence needs
- Land authorities, private sector, academia

Geospatial information - a broad spectrum of cross-sectorial applications

Support societal benefits

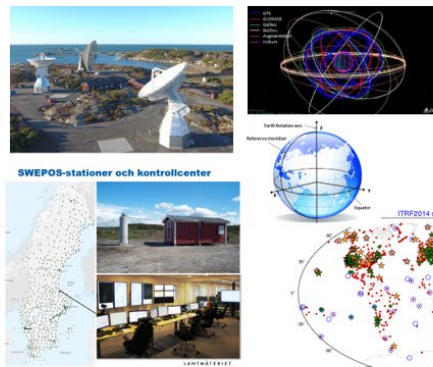
National geospatial data infrastructure



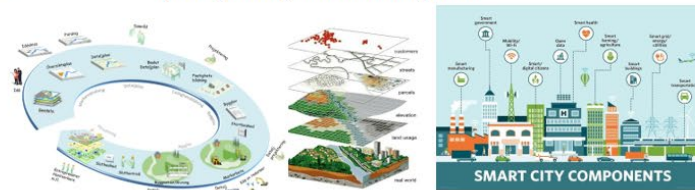
Surveying and geospatial data collection



Geodetic infrastructure



Spatial planning and land development



Autonomous vehicles and ships



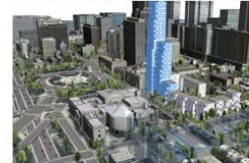
Application development



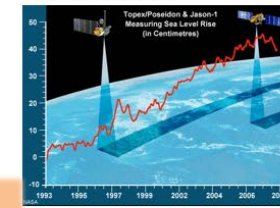
Recognised knowledge and competence needs:

- Geospatial information science
- Geodesy and data capture techniques
- GIS and application development
- Programming, ICT and computer science
- Application of new tech
- Sustainable development

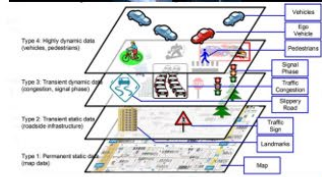
3D-visualisation



Earth observations



Deformation monitoring



Flooding analyses



BIM and digital twins



AR (augmented reality)



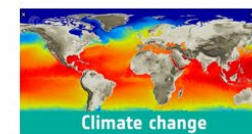
Drones



GIS-analysis, AI, Big Data, IoT, VR



International development cooperation



Climate change observations



Machine guidance



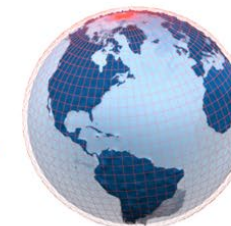
Agenda 2030



UN resolution: A global geodetic reference frame for sustainable development

Integrated Geographic Information Framework (IGIF)

A strategic guide to develop and strengthen national geospatial information management



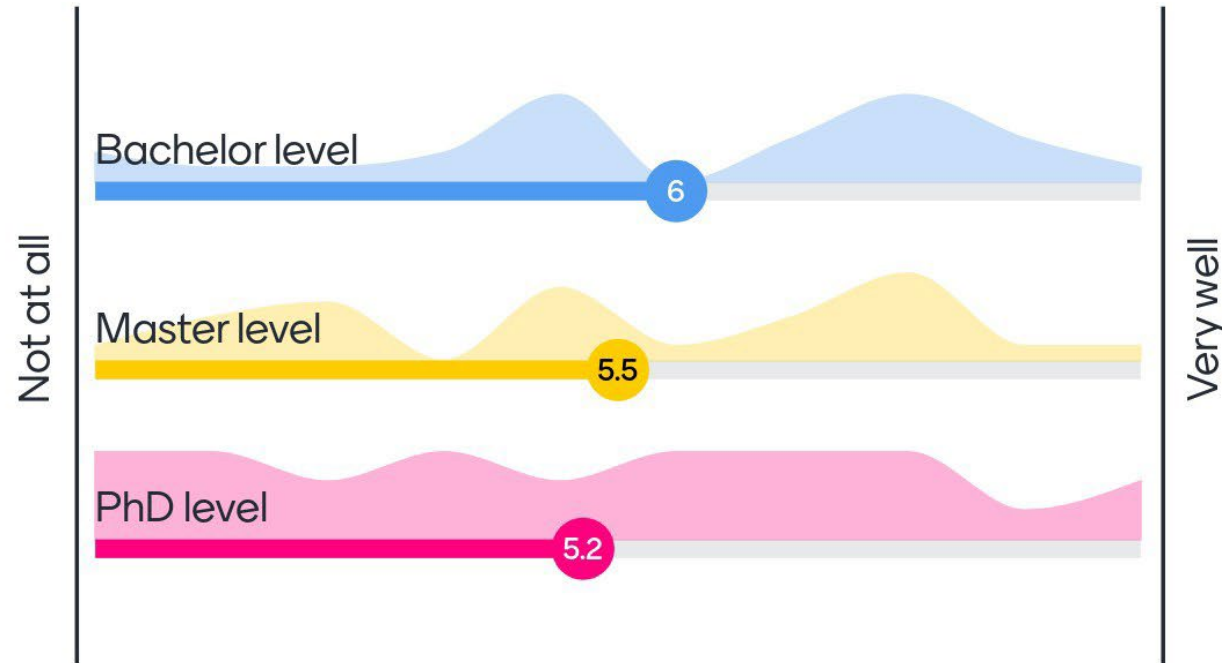
Innovation and entrepreneurship

Collaboration and global development

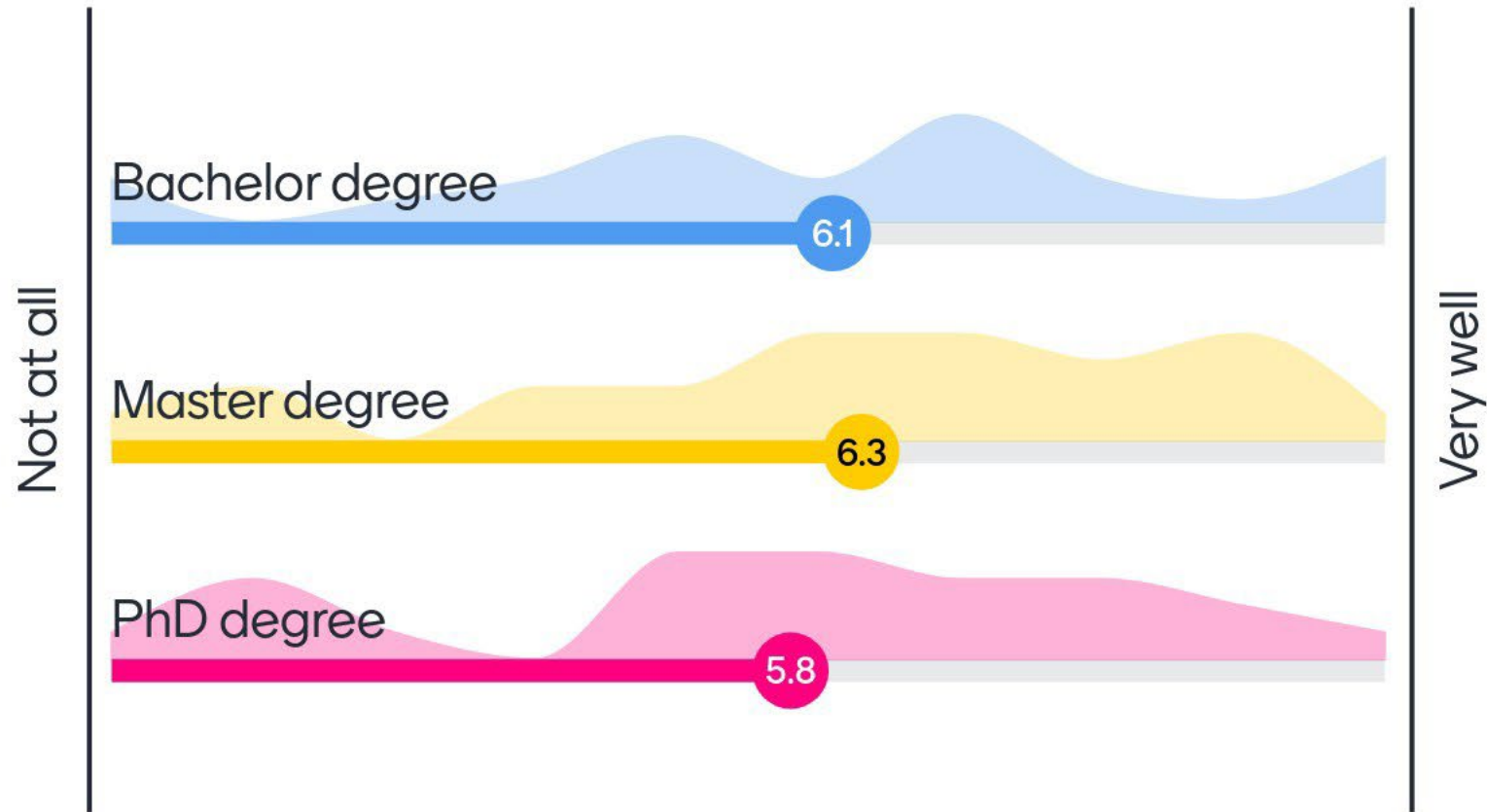
Some reflections

- *“There is a rapidly growing recognition of the use and potential of geospatial information, both as a catalyst for innovations and new collaboration settings and as an essential contribution to combat many societal challenges. This must be reflected in geospatial education programs”.*
- *“Drivers like digitalization, emerging technologies, and data revolution require experts in the geospatial industry to widen their competence to be able to capitalize on new opportunities that did not exist earlier.”*
- *“The education needs to have a broad perspective to recognize the full use of geospatial information for the contribution to social, economical and environmental benefits”*
- *“Introduce academia-industry partnerships for “work-integrated learning” and competency to stay abreast of the latest developments in technology, theory and practice, which promotes lifelong learning”*
- *“We must continuously align the geospatial education with the new developments and find better/new ways to attract students!”*

How well does the *number* of graduated students in geospatial science correspond to the needs in your country?



Is geospatial education in your country aligned with the competence needs?

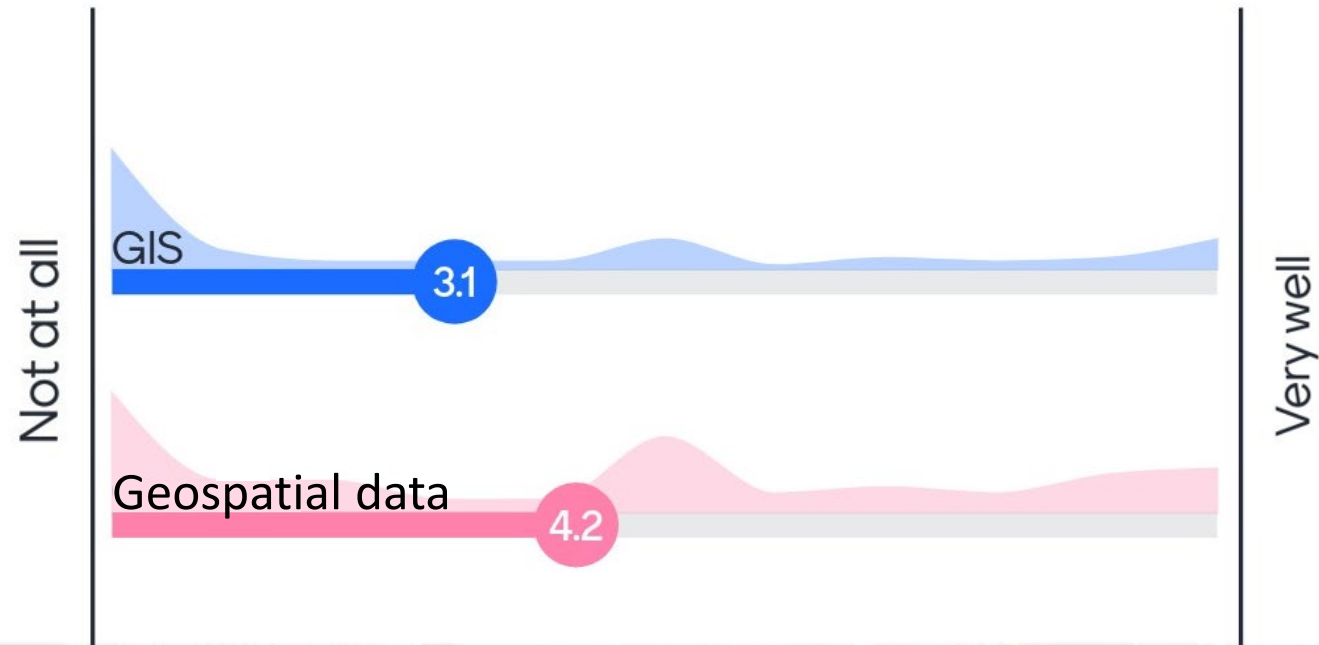


How important are the following factors when marketing advanced education to students in upper secondary school?



Students' side event

How well do you recognize the notions GIS and geospatial data?



How interested would you be to participate in a deepened dialogue based on today's webinar?

