



Enhancing Digital Geomedia Capabilities for UNESCO-designated sites

A Comprehensive Needs Assessment and
Evaluation of Pilot Training Courses

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- **UNESCO Chair** on Observation and Education of World Heritage and Biosphere Reserve
- **Fields of Focus:**
 - Using modern geo-information technology
 - and geo-ecological field- and laboratory methods to
 - analyse, communicate and sustainably develop UNESCO sites.





- Opening: March 2010
- >2,000 trainee teachers & teachers
- >20,000 pupils
- >1,000 events
- >300 educational institutions

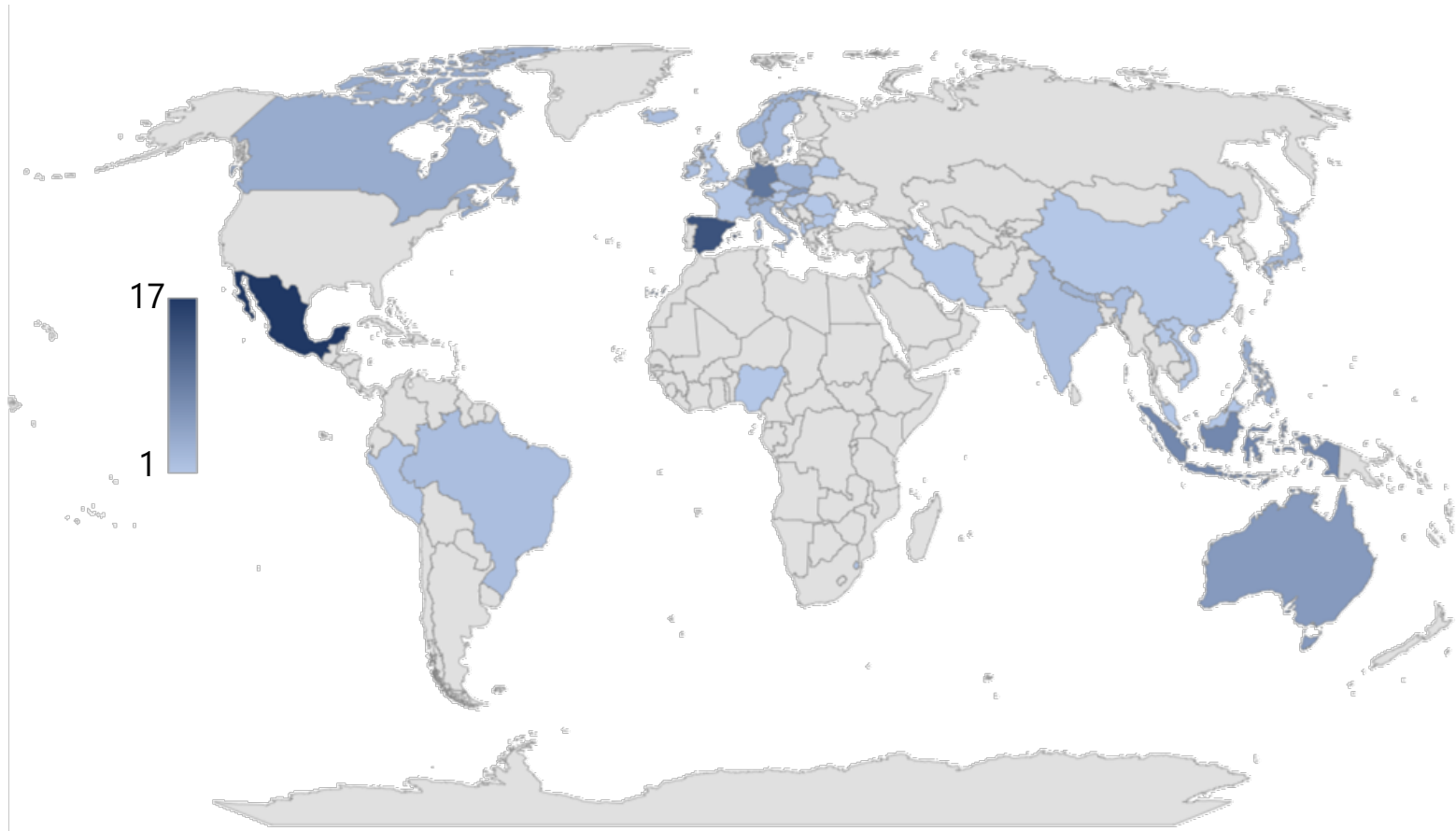
International Needs Assessment



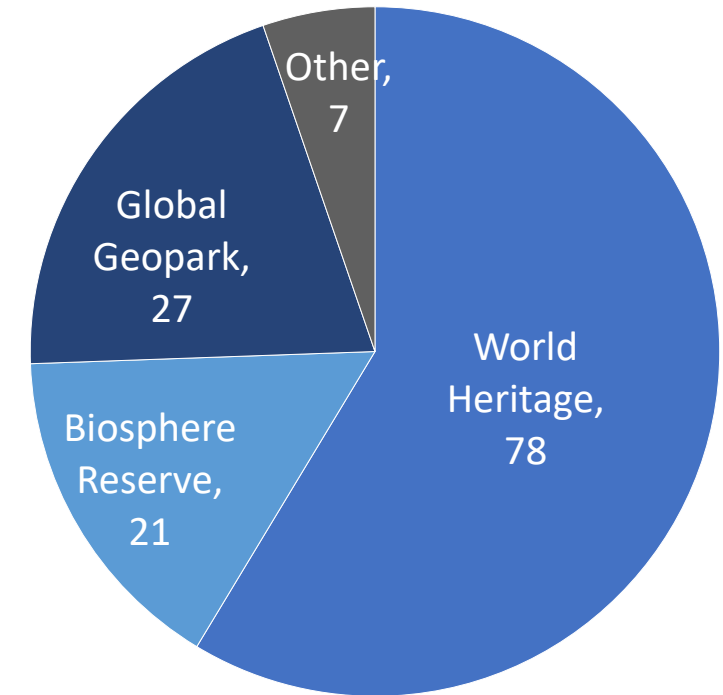


Number of respondents

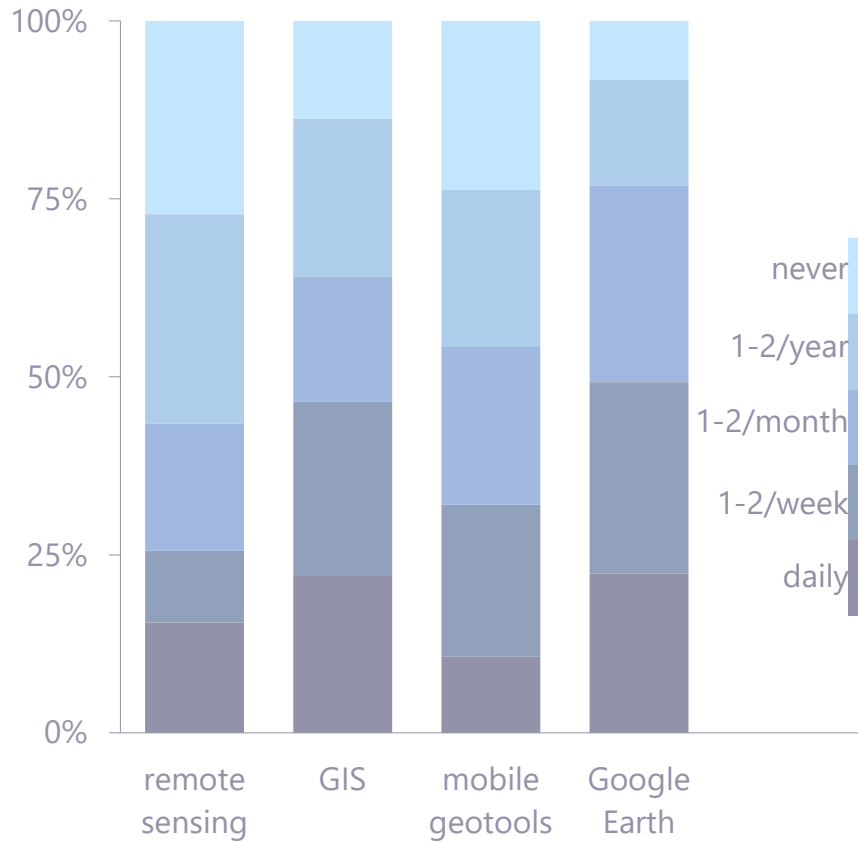
a) per country



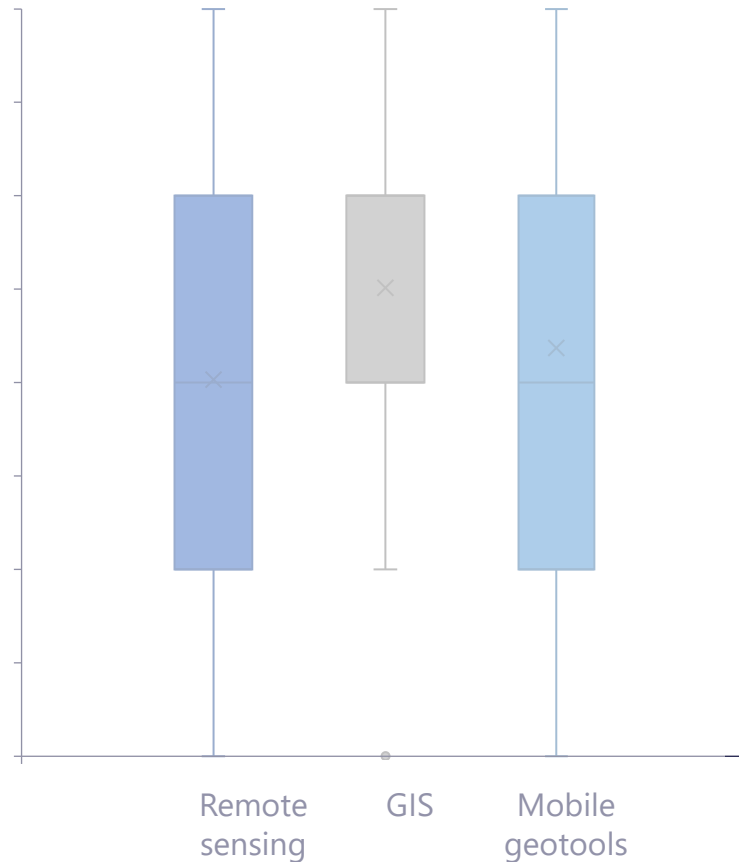
b) per type of UNESCO site



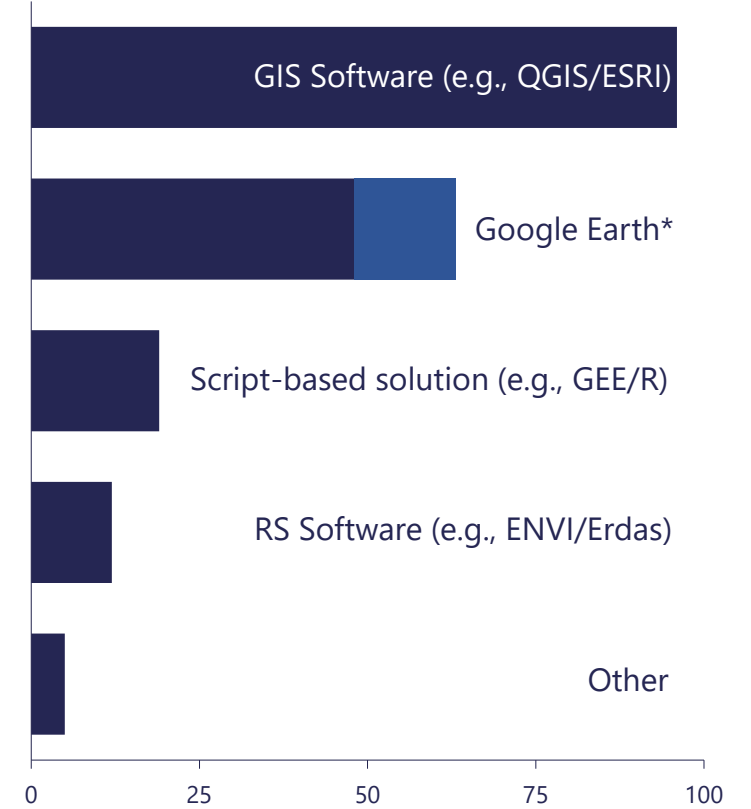
Frequency of using digital geomedia



Self assessment of knowledge



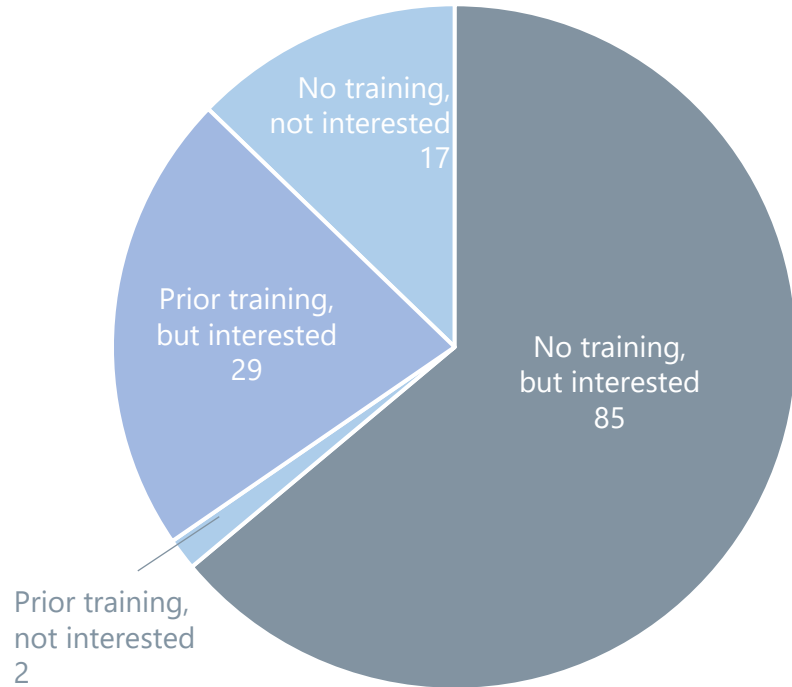
Used software



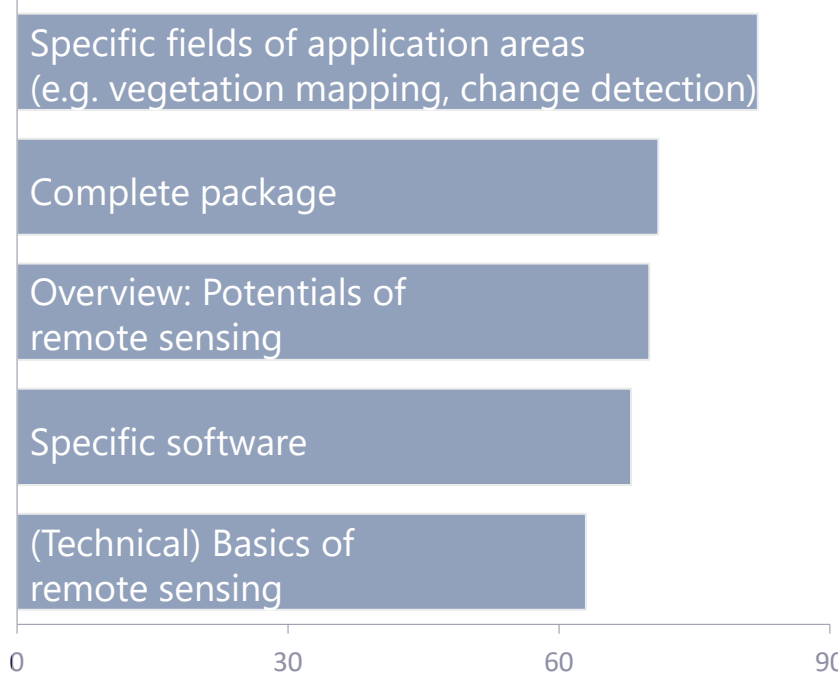
Multiple answers possible
 *15 rely solely on Google Earth for their purposes



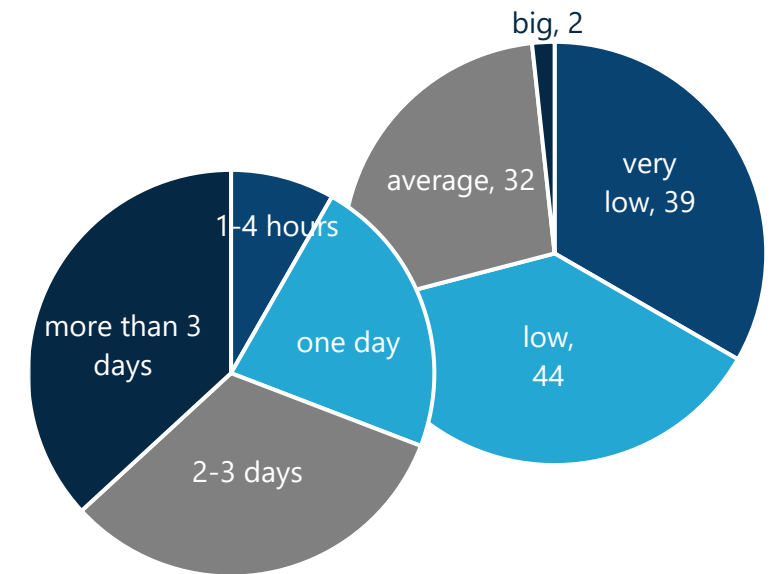
Interest in training course



Preferred topic for training course



Available budget for and preferred duration of trainings



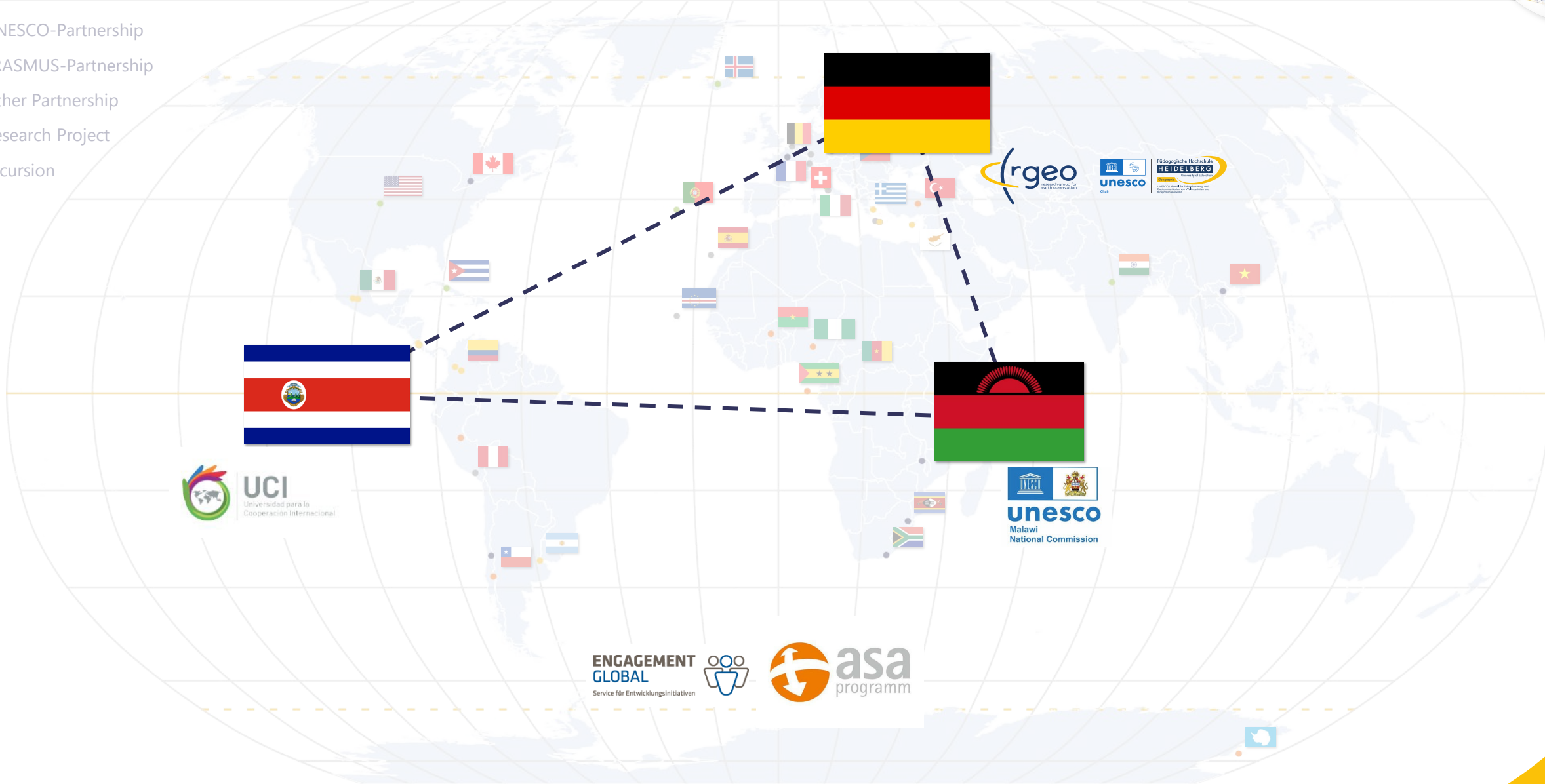
Pilot Courses



Partner Organisations and Involved Parties



- UNESCO-Partnership
- ERASMUS-Partnership
- Other Partnership
- Research Project
- Excursion



Geodaten: naturalearthdata.com



Costa Rica



Hybrid mode

Members of National Committee of BR in CR

Online self-learning modules, online support & face-to-face sessions

Data acquisition, land-use mapping, Visualization

Mixed prior knowledge

Malawi



In-Person Training

Members of MAB Program & Local Ministries

Face-to-face teaching, individual support & written manual for self-revision

Data acquisition, digitalization and field data collection

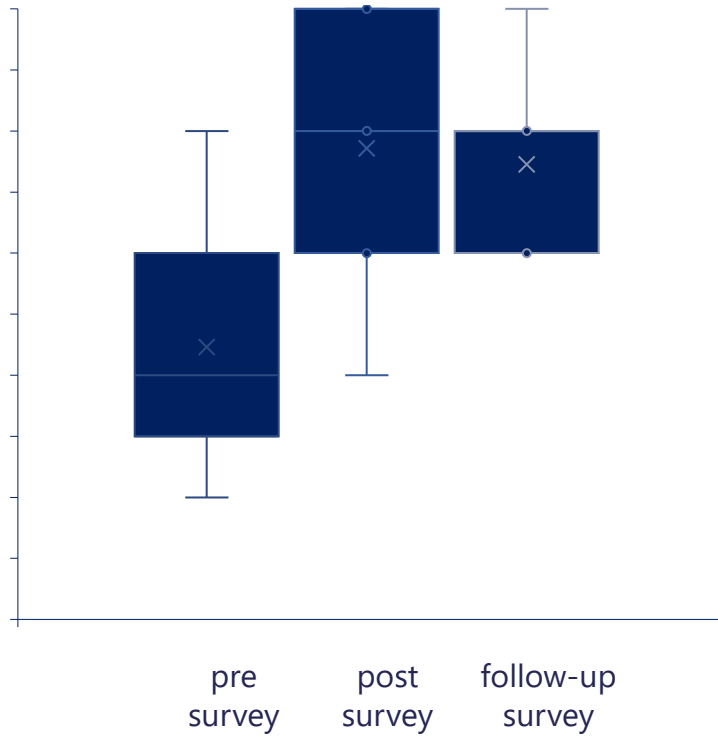
No to mixed prior knowledge

■ Course Evaluation

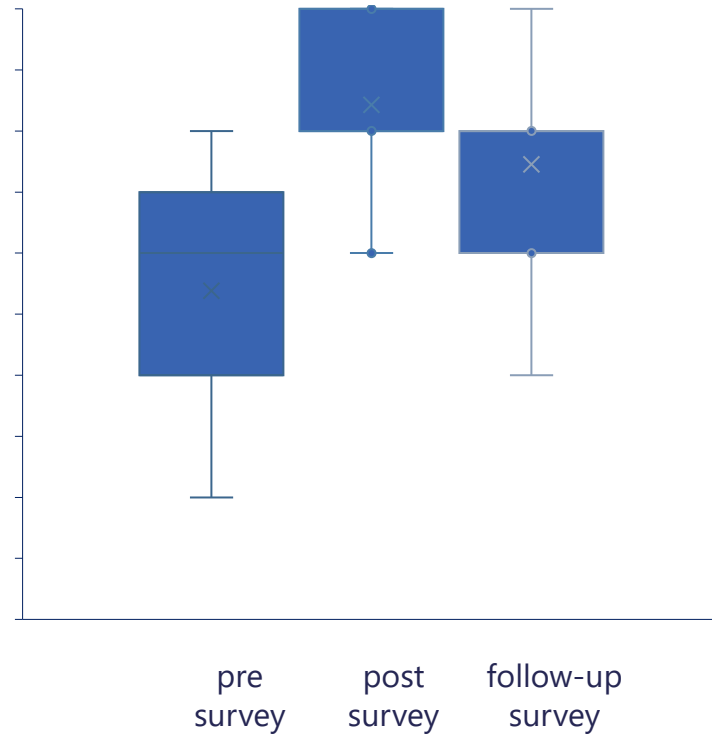




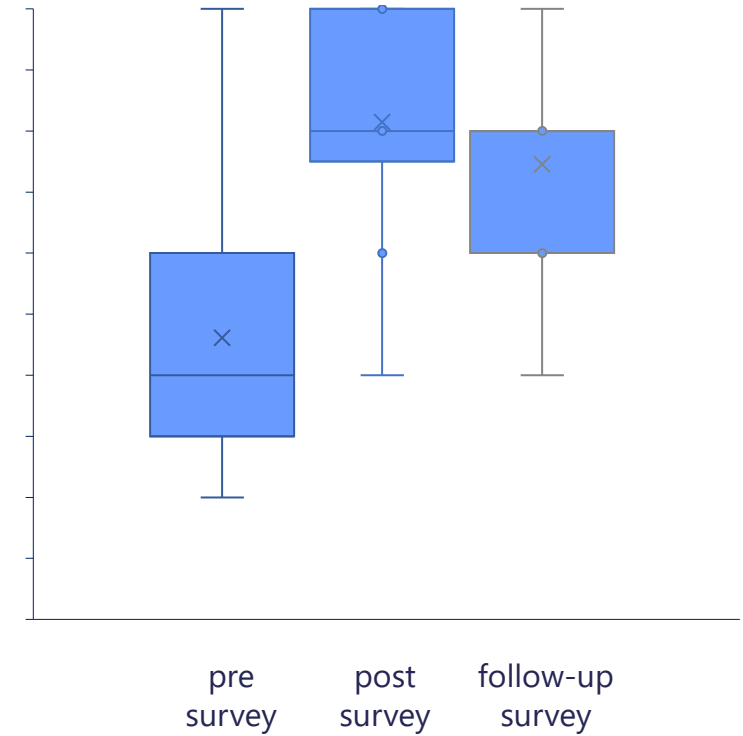
Remote sensing



GIS



Mobile geotools



Pre-Survey, n = 13; Post-Survey, n = 14; Follow Up-Survey, n = 11, conducted in CR & MW

Overall Course Evaluation



Moderately successful,
little taken away



Total success,
very enriching

“The training was well organized and presented. However, the time for the training was little as the course is of high significant and too technical (...)”
(MW_Post_1)

“The platform is excellent and the contents are clear and easy to understand. The videos are of an ideal length.”
(CR_Post_1; translated from Spanish)

“Better understanding of Costa Rica's Biosphere Reserves and mastery of a basic tool for their management.”
(CR_FU_2; translated from Spanish)

“Now i have basic knowledge of gis and how its used in data collection”
(MW_FU_4)



Extension of the Course

- ↳ Lengthen the course
- ↳ More room for practical exercises & data collection
- ↳ Additional tasks for more advanced participants
- ↳ Subsequent advanced courses or courses at a different level
- ↳ Expand invitations/manual to others
(e.g. Physical Planning Officers, Land resources officers, Housing officers)

Organization & Management

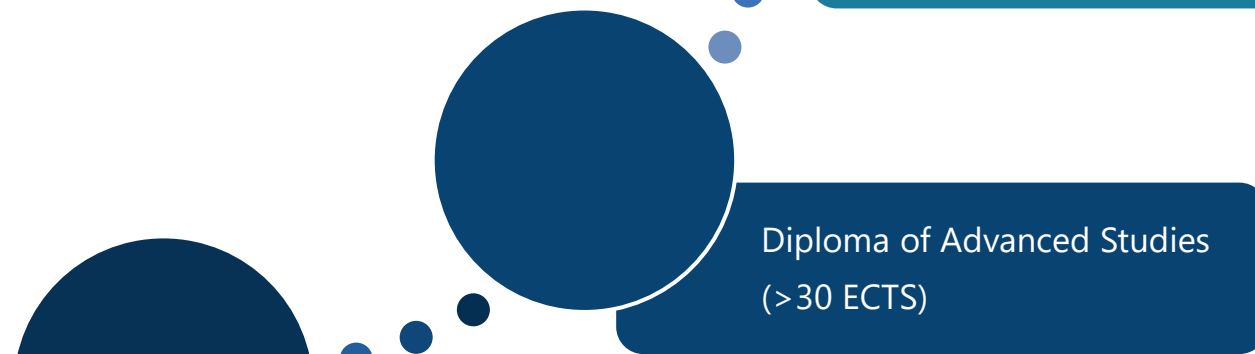
- ↳ More intensive face-to-face sessions (hybrid-course)
- ↳ Only online-sessions (hybrid-course)
- ↳ Outside normal working environment to reduce distraction (offline-course)
- ↳ Availability of high-speed internet and/or data preparation via USB stick to save time (offline-course)
- ↳ Clearer requirements for participants regarding technical equipment



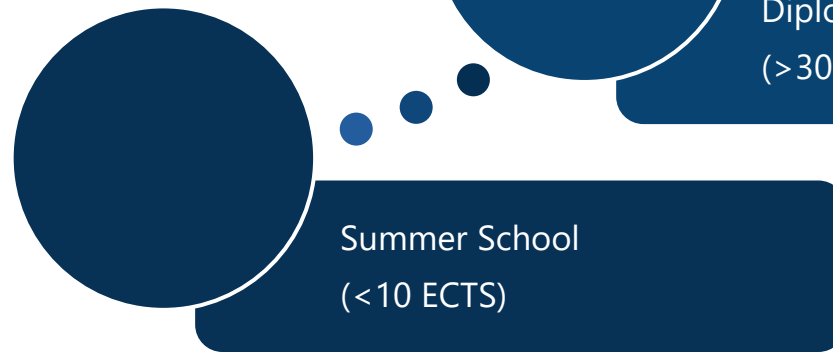
- UNESCO-designated site stakeholders and those who want to become or work with the sites
- Blended-Learning Approaches
 - Geo:spektiv (Adaptive E-Learning Platform)
 - BLIF:Explorer (Remote Sensing Software)



International Master of Science
(120 ECTS)



Diploma of Advanced Studies
(>30 ECTS)



Summer School
(<10 ECTS)



Thank you!

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