

# **Education, Training and Skills in Scotland**

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# Key Messages

- Geospatial is flourishing in Scottish Higher Education
- **But can we meet the future UK demand for skilled professionals?**
- Question over diversity
- Create pathway from schools into great careers
- Crystallise the importance of geo within data science
- Create opportunities to upskill existing staff
- Collaborate: no one group can do all of this

# Context

- Strong university-level provision in GIS:
  - Edinburgh was world's first Masters programme in 1985
  - Around 1000 graduates now working at all levels
  - Professionally accredited via RICS
  - Further Masters in Aberdeen and Glasgow
  - Undergraduate provision in Aberdeen, Abertay, Dundee, Edinburgh, Glasgow, Ggw Caledonian, St Andrews, Stirling, Strathclyde, UHI
  - Attracts international students and several of these universities also teach overseas

# Context

- Geospatial into Data Science via DataLab
- Data Education in Schools
- Bayes Centre leading data science at UoE
- EDINA:
  - provides data and associated training to UK universities, colleges and research institutions (e.g. Digimap) and many schools
- Strong geospatial research in Scotland (including doctoral training)

# Context

- Limited provision in Schools and Colleges
- Fragmentary schools work through RSGS/SAGT, universities, commercial entities (ESRI-UK) and Improvement Service, often as personal initiatives
- No effective provision in Colleges, despite some engagement with SQA

# Wider Vision

- Grow the geospatial sector in Scotland:
  - draw inward investment
  - develop a home-grown entrepreneurial talent
  - promote employment
- **This requires a rich and diverse skills base**
- Collaboration between Scottish Government / Scottish Enterprise and Location Data Scotland

# A Skills Gap

"Your MSc graduates are great, but they all want to be managers and leave after a few years"

Only around 10-15% of Edinburgh MSc graduates come from Scotland

Perhaps another 10% remain and work here, although more would like to

# What's Missing?

- Student funding
- Engagement with schools
  - Explain that geospatial = interesting well-paid jobs
  - A career path for geography
  - Inspire pupils: maps and computers are coool
  - Engagement = geography teachers, ICT teachers, guidance teachers, parents?
- Ensure college-level geospatial provision
  - for training into jobs and routes into higher education
- Promoting diversity (existing route doesn't suit all)
- Modern apprenticeships
- Upskilling and reskilling existing staff
- GI awareness training for management

# Short Term Aims

- LDS is gathering anecdotal evidence from organisations of the skills challenges
- LDS and AGI-S working on industry questionnaire
- Intend to hold round table(s), involving partners, enablers, providers, potential employers:
  - AGI
  - RSGS
  - SAGT
  - Universities
  - Colleges
  - Education Scotland / SQA
  - Skills Development Scotland
  - Government
  - Industry
  - Professional Bodies
  - Incubators
  - Networks
  - GC

# Strategic Approach

- Analyse survey evidence
- Discuss challenges in a round-table to consider how we can collectively address the challenges
- Feedback outcomes to key stakeholders

# Discussion

- How: short, medium and long term goals
- Gathering evidence:
  - Are you able to meet current staffing needs?
  - Do you think you will be able to meet future staffing needs?
  - Are you able to retain staff?
  - Are you happy with opportunities for staff development?

# Thank you!

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