Fieldwork
Fieldwork

• Core to many degrees (benchmarking, accreditation)
• Many major advantages
• Fundamentals of teaching practice are familiar (ilos, design, assessment)
• Some unique features & challenges
• A growing number of problems which are become even more significant
This document aims to:

- outline the main elements in fieldwork design
- investigate the nature and diversity of fieldwork
- assess the practical and pedagogical issues facing fieldwork leaders
- discuss the issues surrounding fieldwork in higher education
Influences on fieldwork design

Figure 1.1 Influences on Fieldwork Design

John Maskall and Alison Stokes, 2008
Elements in fieldwork design

Figure 1.2 Elements in Fieldwork Design

John Maskall and Alison Stokes, 2008
Resource:

• BUTLER, R. (2008) Teaching Geoscience through Fieldwork. GEES Teaching and Learning Guide. HE Academy Subject Centre for Geography, Earth and Environmental Science.

• Funded by the Higher Education Academy Subject Centre for Geography, Earth and Environmental Sciences (GEES)

• ISBN 1-84102-1458-8
ACTIVITY 1

What issues are you facing in your field teaching?

Note: Your answers, as an individual reader, or collated from a group discussion, may be used to prioritise the order in which you access material in this guide, and to interrogate content in more detail as appropriate.

ACTIVITY 2

What do you consider to be the THREE most important reasons for teaching through fieldwork?

ACTIVITY 4

What do you believe constitutes a viable fieldwork programme for each stage of your course?

You might list the teaching and learning outcomes and consider how much time should be devoted to delivering them at the various levels of progression.
The main benefits/importance of fieldwork?

5 mins discussion in groups
In order of priority, fieldwork important because it...

- puts subject theory into practice
- Provides training of observational and general descriptive field skills
- provides training of graduate skills such as independent critical thinking
- provides training of field skills for specialist data collection
- motivates students through inspirational field locations
- provides training in graduate skills such as time management
- allows the preparation of a map

237 academic respondents across GEES subjects, Mark Anderson, Feb 2016 (consistent across subjects)
Main Challenges to fieldwork?

5 minutes discussion in groups
In terms of priority, the main challenges to fieldwork are:

- Cost to the Department/School
- Cost to the student
- Class size
- Health and Safety
- Staff expertise
- Diversity and inclusion of students
- Student engagement
How to make fieldwork more affordable (=sustainable)?

a) for students

b) for Schools/Departments

- 10 minutes discussion in groups

- 5 minutes general discussion (1 suggestion from each group)
Top 3 problems are cost (to both student & dept) and class size, so...

...use campus/local area?
...use technology?
...use virtual reality?
• On-campus geological mapping and field skills training for large classes of Earth Science students

Gordon Curry & Tim Dempster
Possible uses of campus/local parks and resources? – advantages & disadvantages

- 5 minutes discussion in groups
- 5 minutes general discussion (1 suggestion from each group)
Technology?
• Derek France • W. Brian Whalley Alice Mauchline • Victoria Powell Katharine Welsh • Alex Lerczak Julian Park • Robert Bednarz, 2015

• Enhancing Fieldwork Learning Using Mobile Technologies

• ISSN 2192-4759 SpringerBriefs in Ecology

• ISBN 978-3-319-20966-1
  DOI 10.1007/978-3-319-20967-8

• ISSN 2192-4767 (electronic)

• Library of Congress Control Number: 2015943798

• ISBN 978-3-319-20967-8 (eBook)
Field data can be collected and shared using on tablets through *FieldtripGB*. This app created by EDINA at the University of Edinburgh can be used offline and uses *Dropbox* to upload and synchronise the data when in a Wi-Fi hotspot. A bespoke field data collection form can be created, prior to the fieldwork and subsequently presented on a base map or exported for further analysis. Other field trip notebooks are available and discussed in Chap. 4.
What does FieldTrip GB do?

- All the key features:
- Capture information
  - Images
  - Audio
  - Text
  - Location
- High quality background maps
- Saved maps for use “offline”
- Custom data collection forms
- Manual location correction
- It’s Free!

http://fieldtripgb.blogs.edina.ac.uk/
• Free to download and use
• High quality background maps that offer rich data in both urban and rural environments
• Map caching to allow off-network usage
• Data capture
• Custom data collection forms that allow users to define the data they want to capture.
Fig. 9.1 Ways that mobile devices can facilitate the interaction between PLEs and GLEs via cloud storage and Web 2.0 interactivity
Possible uses of technology? – advantages & disadvantages

- 5 minutes discussion in groups
- 5 minutes general discussion (1 suggestion from each group)
eGaming and the Virtual World?
eGaming & the Virtual world?

• An example Virtual Worlds, Univ of Leeds
GPS:

Eastings: 9008
Northings: 3024
Elev: 80 m

Travelled: 108 m
Time Elapsed: 3:28
GPS:

Eastings: 9008
Northing: 3024
Elev: 80 m

Travelled: 108 m
Time Elapsed: 3:57
OUTCROP DESCRIPTION:
In grass on hill top

NOTES:
A large fault outcrops placing shattered quartzite to E against
disrupted limestones to W; the fault plane was measurable
though bedding was highly contorted. Fault; 014 / 75 W

DATA:
Bedding; 168 / 14 E
Possible uses of eGaming and virtual worlds? – advantages & disadvantages

- 5 minutes discussion in groups
- 5 minutes general discussion (1 suggestion from each group)