

10 ways to make fieldwork more inclusive and accessible : a guide for educators

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growing an inclusive teaching environment

10 ways to make fieldwork more inclusive and accessible: a guide for educators.



Prepared by Dr Lynda Yorke, Dr Simon M. Hutchinson, and Dr Liz Hurrell, with input from the academic community.



Environmental fieldwork: what are the issues?

Barriers to fieldwork can be both visible and invisible.

Environmental subjects (teaching and research) have fieldwork and site visits at their core. However, fieldwork can be a barrier to some groups of students. Some of these barriers may be physical challenges such as climbing a steep slope or stomping over uneven ground, but there are also many invisible barriers related to mental health, specific learning needs or simply not seeing themselves represented in these environments.

We need to ensure that all teaching and learning is accessible and, sector wide, there is increasing awareness of the need to think more carefully about equality, diversity and inclusion (EDI) and therefore accessibility in all aspects of field working.

There are many examples of best practice for creating more inclusive field teaching.

This booklet was created by bringing the academic community together to discuss the challenges associated with fieldwork and how members of the community have addressed those challenges. This has resulted in us identifying 10 ways to make fieldwork more inclusive and accessible. This is not intended as a definite checklist to follow in order, but provides pointers, ideas and support to improve field-based learning and teaching, particularly at undergraduate level.

What is the CULTIVATE project?

CULTIVATE was a NERC-funded project addressing digital technologies, equality, diversity and inclusion, and undergraduate field courses. The project aim was to grow an inclusive teaching environment for everyone in environmental sciences.

- How can you do that?
- What should you be considering?
- Where can you go for help and support?



How to use this guide.

This is not a box ticking exercise.

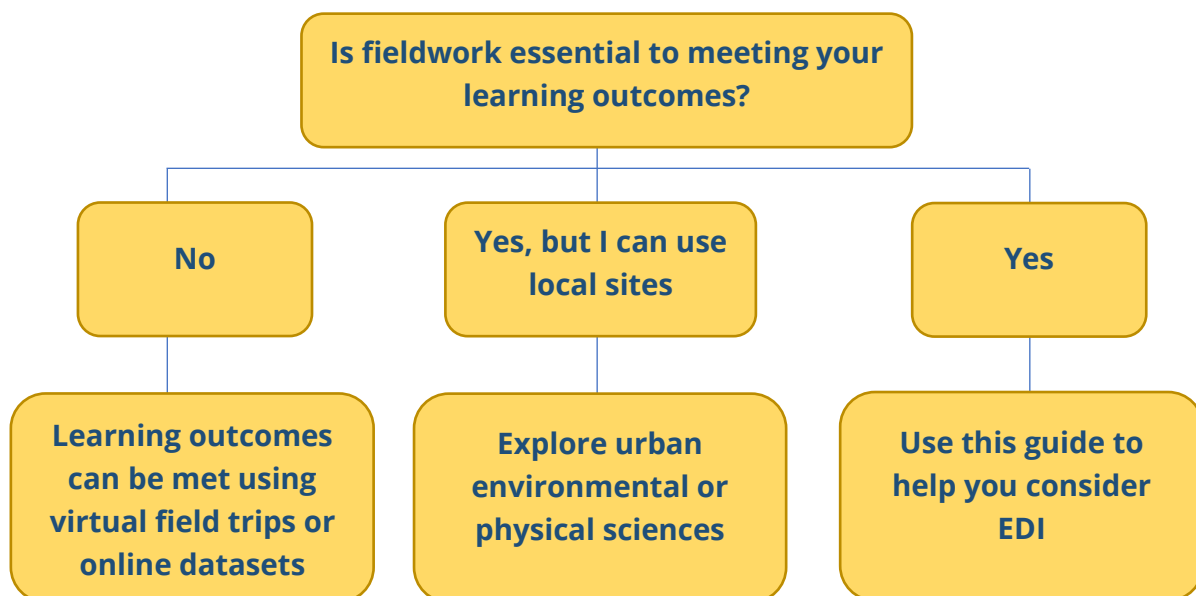
By bringing the academic community together to discuss equality, diversity, and inclusion (EDI) around fieldwork, we've identified 10 ways to help ensure your field-based teaching is as inclusive and as accessible as reasonably practicable. This is not a definitive list and is for guidance only, and many EDI issues are context specific.

1. What are my preconceptions of fieldwork?
2. Are you making assumptions about experience and expectations of your class?
3. How are you going to deliver the content? What should you consider?
4. Scheduling activities.
5. What are the costs?
6. Accommodation and catering.
7. Have you shared your plan?
8. Staff and student health.
9. Field locations and EDI.
10. You are not alone.

1. What are my preconceptions of fieldwork?

Challenge preconceptions that fieldwork is essential, needs to be remote, considered the 'best part' of a course and needs to be physically demanding.

Evaluate your learning outcomes. Fieldwork may be essential to meeting your learning outcomes. Equally, the same learning outcomes could be met without fieldwork or through more local trips, thereby reducing some barriers.



Review your fieldwork annually:

- Is the site(s) still accessible?
- Do I need to review issues that arose from the previous trip?
- For individual cohorts, what adjustments might I need to make?

2. Are you making assumptions about experience and expectations of your class?



Not all students will have fieldwork experience.

Particularly in first year, students may have little or no experience of field work. They may have no understanding of:

- The weather (how cold it can be standing making notes).
- The fitness or physical requirements.
- The length of day.
- The terrain.

Avoid making assumptions and, where possible, undertake pre-trip activities to assess skill and fitness levels.



3. How are you going to deliver the content? What should you consider?

A site by site, outdoor lecture style field trip may not be the most accessible way of delivering your learning outcomes. Students may not be able to hear you clearly and neuro-divergent or students with dyslexia may find there is not enough time to process the information and make an adequate record in a field notebook.



The following could help make your field trip more accessible:

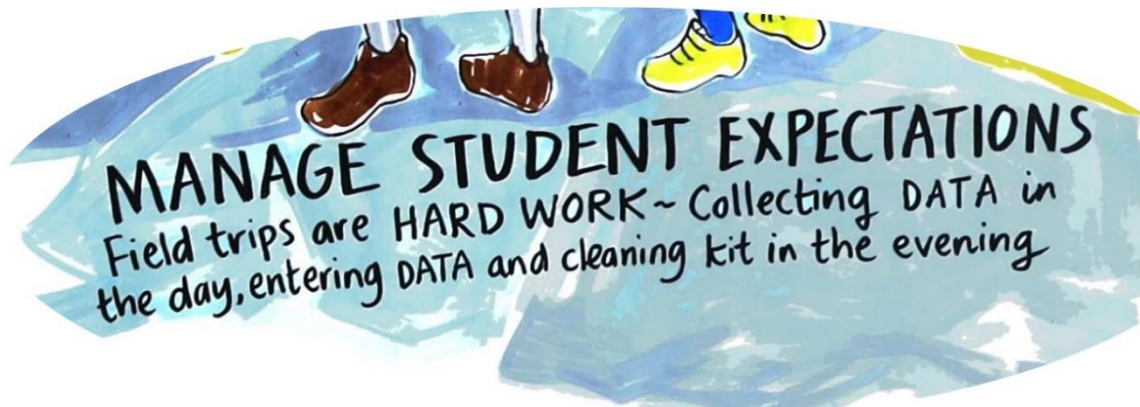
- Experiential formats.
- Providing notes and photos before, during and after the trip.
- Giving students options e.g., writing in a field notebook or recorded voice notes; hard-copy field guides or app formats.
- Virtual field trip prior to an in-person trip may help students become more familiar with key content.



Consider group task tensions, individual learning styles, and personal characteristics.

4. Scheduling activities.

Fieldwork (particularly residential) is an expensive form of teaching, and there is a temptation to cram a lot in. However, fieldwork can be intense with students working closely together for long hours, eating together and potentially sharing a bedroom. This, on top of the cumulative physical impacts of fieldwork, can lead to tired and stressed staff and students.



Ensure adequate down time (and space) for staff and students, communicate this clearly and avoid the need for evening work and assessments.

For physically challenging fieldtrips carefully consider the timing of activities. For example, can you time the steep climb before lunch so that everyone has a break and allows slower members to catch up.

In your schedule consider individual student needs. For example, for day trips avoiding early starts so that students have time to drop-off children. Consider religious needs, such as the need to pray.



5. What are your costs?

Socio-economic backgrounds can be a hidden barrier to fieldwork.

Appropriate clothing and footwear are essential for health and safety, but come at a cost to the student. There can be hidden costs such as digital technology requirements, money for snacks and leisure activities.

Consider:

- Departmental kit loan schemes.
- Donation stations for final year students to donate unwanted kit.
- Practical advice on what you really need in the field.



Be honest and clear about the costs involved as soon as possible.



Some optional trips may incur additional costs and staff increasingly need to find cost-effective fieldtrip locations and facilities. Ensure you consider the learning outcomes of your modules/course, alongside student needs e.g. accommodation.

6. Accommodation and catering.

Cost-effective fieldtrips often require using basic, hostel type accommodation with shared dormitories. This can present issues for students with:

- Medical health needs (visible and non-visible).
- Neuro-diverse considerations.
- Gender-room anxieties.

Resolving these issues can be tricky due to limitations in the number of single rooms available.



Discover and collate the needs of your students, talk to individuals, and facilitate compromise in advance.

Food can be a source of anxiety for students and with the physical demands of fieldwork it is essential that students are eating well.

Collate information on:

- Student dietary requirements, pass on allergy information to providers.
- Religious and cultural sensitivities around food and alcohol; be aware of times of fasting.

7. Have you shared your field trip plan?

Publishing a detailed timetable of activities can help alleviate a lot of anxiety and help to manage expectations.



Some students will need clear information to manage pre-existing conditions. Other students will be anxious about the unknown. Detailed field guides, day-by-day timetables, and morning briefings can allow students to be prepared, make reasoned decisions about participation and alert staff to potential problem areas.

Sharing a plan early will facilitate discussions.

Ensure your plan covers both academic and practical aspects e.g.:

- Details of breaks, so students can manage their energy levels.
- When you will eat – important for students with medical needs.
- When and where will toilets be available.
- What kit will the students need to carry for each day.

8. Staff and student health.

It is standard practice to gather information on the health-needs of students, and for staff to be trained in medical first aid. Staff often feel prepared to deal with medical problems, but mental health challenges are an increasing concern.

Be aware that some students will not disclose.

Due to the intensity of fieldwork (particularly residential) and long hours with the same people, fieldtrips can be a challenge mentally for staff and students. Fieldtrips require staff to provide both academic and pastoral support.

- Consider undertaking a mental first-aid course.
- Create an environment that empowers staff and students to disclose information so that adequate support can be implemented.
- Encourage students to look out for each other and alert you to any issues or concerns.



For more complex medical or mental health challenges seek help from appropriate professional services. Remember to include these cases on the risk assessment. It might be that despite your best efforts it is not safe for a student to attend a trip, and this is OK.

Know your limits: seek advice and support.

9. Field locations and EDI.

Educate students on the local cultural and environmental sensitivities of their field locations

We often think about EDI in terms of our own student population. However, we must consider the cultural sensitivities of the place we visit in terms of a) ensuring, as visitors, we are not disrespectful to local customs and b) ensuring local cultures will not negatively impact our students.

You may need to be aware of local attitudes:

- Gender, gender identity, and dress.
- Sexuality and religion.
- Food and alcohol consumption.
- Field sites e.g. sacred monuments or status (e.g. SSSI).



Reducing travel and the use of remote field locations through adopting local or online field alternatives can have both EDI and sustainable benefits and can help protect sensitive sites.



Creating inclusive fieldtrips can also address sustainability agendas.

10. You are not alone.



This booklet was created by the community for the community.

Preparing for a field trip can be time consuming and involve a range of competing drivers (cost, learning outcomes and the demand of the rest of the curriculum). Adding another layer of 'student issues', convincing other staff of the need to do so and delivering something that, on the day, may be impacted by something as basic as poor weather can be stressful.

Ultimately, greater inclusion in field teaching will provide a better experience for the whole cohort. Making EDI adjustments and providing additional means of support are a long-term investment, which will support your field teams for years to come.

Visit www.cultivate-project.com for stories and digital technology that support EDI in the field.

Further information

Our website www.cultivate-project.com contains stories, digital technology review and resources aimed at supporting equality, diversity, and inclusion in the field.

Recommended Reading

Giles, S., Jackson, C. and Stephen, N., 2020. Barriers to fieldwork in undergraduate geoscience degrees. *Nature Reviews Earth & Environment*, 1(2), pp.77-78.

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Stokes, A., Feig, A.D., Atchison, C.L., and Gilley, B., 2019, Making geoscience fieldwork inclusive and accessible for students with disabilities: *Geosphere*, v. 15, no. 6, p. 1809–1825, <https://doi.org/10.1130/GES02006.1>

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Get involved

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Visit the CULTIVATE project website for more information and resources:

www.cultivate-project.com