

Good Practice Guide



FIRST YEAR GEOGRAPHY 2015

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BACKGROUND



This good practice guide was developed as part of the OLT project “Renewing first year curricula for social sciences and humanities in the context of discipline threshold standards”. The project investigated what we need to do in first year in order to prepare our students to meet the Threshold Learning Outcomes (TLOs) for the discipline by the time they graduate.

The TLOs for Geography were developed through the Learning and Teaching Academic Standards (LTAS) project in 2010. Professor Iain Hay, as discipline scholar for the Arts, Social Sciences and Humanities, led the project with a Geography discipline reference group representing academics, employers and professional bodies. The TLOs for Geography can be found at URL: http://www.olt.gov.au/system/files/resources/altc_standards_GEOGRAPHY_080211_v2_0.pdf

The intersection of the graduate Threshold Learning Outcomes (TLOs), signature pedagogies and the first-year pedagogy principles involves an approach that is both transitional (including both curricular and co-curricular elements) and discipline specific—and these are intertwined.

The approach is based on an expectation that students learn and are able to demonstrate, at a level appropriate to first year, knowledge and understanding of certain disciplinary concepts, methods, terminology etc, and the kinds of skills that enable them to apply or express this knowledge—and these learning outcomes must be assessable.

At the same time, the approach suggests that curriculum and assessment design, and other aspects of pedagogical practice are organised around the challenges of transition to university study, the diversity of students’ backgrounds and prior learning, and the need to scaffold first year students’ learning in order to set them on their way to meeting the TLOs in their final year.

The challenges—or possible barriers to maximising learning—are similarly both transitional and discipline specific, and are experienced very differently by different students.

Our teaching strategies must also, therefore, involve both transitional and “signature” (or disciplinary) pedagogies. We need to design and teach in ways that will engage and motivate student learning. To cater for student diversity, creativity and agency, we need to make the disciplinary discourses accessible, design assessment that is challenging yet achievable, and make our criteria and standards explicit. We must scaffold and support students, at the level of individual assessment items and, more broadly and in the longer term, to help them become efficacious and independent learners. We need to focus our curricula design on student learning rather than discipline content, yet at the same time ensure that, at the end of first year, all students who have met the minimum requirements are—and feel that they are—well-equipped to continue their studies in the discipline and meet the TLOs at the end of their degrees.

This guide was developed to complement the website for the project that contains more detail www.firstyearlearningthresholds.edu.au. The website and the guide were developed in consultation with the Geography academics who attended our workshop in June 2014.

The guide is organised around the TLOs and focuses on:

1. What do first year **students need to know and do** in order to set them on their way to meet the TLOs by the time they graduate?
2. What are the **barriers to students learning?**
3. What **teaching strategies** can we use?

A few specific examples are included in the document but there are more examples available on the website at www.firstyearlearningthresholds.edu.au.

Demonstrate a coherent geographical understanding of trends, processes and impacts that shape Australian and other environments and/or societies at different spatial and temporal scales

TLO 1a

GEOGRAPHICAL THINKING ABOUT TRENDS, PROCESSES AND IMPACTS



What students need to know and do

First-year students need to know basic geographic concepts of space, place, and scale. They need to demonstrate knowledge of *space* as it may be measured in absolute, relative and/or cognitive-behavioural terms; *place/s* as interdependent, playing specialised and shifting roles in numerous and complex interactions and networks; and how aspects of space and place are understood and analysed at different spatial *scales*. **They need to start to employ geographical thinking that allows them to understand changing practices, patterns, processes, and relationships** between people and their environments.

Student barriers to learning

It can be difficult for students to shift existing 'simple' ways of thinking about space, place, scale and the relationships between them. The concept of place as it is used in the study of geography may be complex for them to understand. **Places are dynamic, socially and historically constructed, the product of human and non-human practices and processes**, the settings for everyday lives and, as such, unique. Students may have difficulty grasping the complex and multi-scalar dynamics of human relationships to space, place and environment.

Our teaching strategies

There are many ways in which we can support our students to 'think geographically'. We can guide their practice in observing and analysing human-environment relationships. Having the students develop a glossary of terms can help to foster geographical understanding and thinking about space, place, environment and scale.

Case studies can assist them to do in-depth investigations of events, trends, processes, practices and impacts in specific 'real-life' contexts. We can provide them with practice in using data to theorise about current trends, processes, practices and impacts.

The media, newspapers and journal articles can be analysed and dissected for geographical concepts and relationships. Different perspectives on an issue can be compared using case studies and/or daily news and headlines focussing on local-global, national, regional, and international.

Example 1: Central place hierarchies

Students identify central place hierarchies for a common phenomenon such as pizza parlours. Using an online business directory (such as Yellow Pages, Urban Spoon, or Google) students identify all the pizza parlours in each of ten selected cities, ranging from small (~500 population) to large (1million +), and preferably in the same state for comparative purposes. Students count the number of pizza parlours and record the town/city name; town/city population; number of pizza parlours.

Students create a log-linear chart in Excel plotting pizza places against the log of population, which should be almost a linear relationship. Students are asked to calculate the 'threshold' value of pizza parlours and to provide reasons for the presence or absence in particular locations.

This activity can be extended by comparing two services (dentists, beauty parlours, car dealerships (Holden, Ford, Mercedes), pubs) for 'threshold' values and distributions.

HOW TO USE GEOGRAPHICAL DATA AND TOOLS

What students need to know and do

First-year students need to learn how to access and use different types of geographic data and tools, for example, Geographic Information Systems (GIS), remote sensing, demographic data, climate graphs, historical photos, and maps (cartography). **They need to practise 'spatial thinking'.**

Student barriers to learning

Students may have difficulty or lack experience and skills for using and interpreting numbers and numerical or quantitative data. **They may also lack confidence in their existing mapping, mathematical and numerical skills.** GIS packages are also complex and students can be reluctant to experiment with them.

Our teaching strategies

At first year we need to be explicit in showing students how to use tools and how they can source data, identify relevant data, make sense of and interpret data and graphs. They will need to be introduced to the tools used in geography and how they are used to produce data. We can assist students in accessing and using geographical databases, archives and resources.

Students can be given access to geographical data to identify trends, processes and impacts of human-environment relationships. **The lecturer can model how to use and compare data.** For example, you could provide student groups with cases, regions or time zones, and then ask them to compare and feedback to class.

Students could be asked to collect their own data, interpret it, and present a brief analysis to the class. You could present students with a geographic / demographic trend relating to the students' own context (e.g. the university environment) and show them how to track, explain and reflect on it.

Example 2: Central place hierarchies

Introduce students to Google Earth software (free version), and to using satellite imagery imbedded in this online environment to identify, categorise, and quantify physical and human geographical features in the landscape. Start by teaching students by demonstration, and then by five minutes of unstructured exploration, how to 'drive' Google Earth, and how to navigate and change the viewing perspective of satellite imagery of their own home and suburb. Allow the students to use the software to look at a geographical feature that has changed over time (for example, the Aral Sea in Uzbekistan, the site of arguably one of the greatest environmental disasters in the 20th century where one of the largest lakes in the world has been converted into a poisonous, shallow, 'disappearing' water body). Students gain experience using the measurement tools in Google Earth to measure the maximum extent of the sea today, the size of the sea at its fullest (decades ago), and then using the historical imagery function, determine when key changes (such as the emergence of large islands from the shallowing sea) took place.

This exercise allows students to learn and practice some key geographical skills (online mapping, derive and locate coordinate locations, and the interpretation of remotely sensed images) while at the same time giving them the opportunity to quantify for themselves the incredible rate of water resource depletion and environmental degradation that has been wrought in this part of the world.

Demonstrate an understanding of Geography as an academic discipline, including awareness of its concepts, history and principal subfields, whilst acknowledging the contested, provisional and situated nature of geographical understanding

TLO 2



GEOGRAPHY HAS MANY SUB-DISCIPLINES AND CONNECTIONS TO OTHER FIELDS

What students need to know and do

Students need to be able to identify the geographical sub-fields, and trace and place Geography's theoretical and methodological connections with other disciplines.

Student barriers to learning

While it can be relatively easy for students to see the impact of human activity on the environment, **it can be difficult to identify the impact that place and environment has upon human and non-human activity**. Students may not always appreciate that perspectives from other discipline areas and other knowledges, including Indigenous, can enrich geographical understanding.

Our teaching strategies

We need to be explicit in identifying the interrelationships between human geography, physical geography and cultural geography. This should include showing how geography and its sub-fields are not static and have changed their paradigms over time. We can then encourage students to think about how they can contribute to future changes.

Field trips can be used where students are asked to identify interrelationships between the different types of geography.

Debates on 'What is Geography? Its past and future possibilities' can open students' eyes to the significance of the discipline and what geographers do.

GEOGRAPHY IS CONTESTED, PROVISIONAL AND SITUATED

What students need to know and do

Geographical understanding is situated, contested and dynamic. Students also need to recognise the multiple perspectives in place.

Student barriers to learning

Students often expect to learn static concepts and understandings, and therefore **find it difficult to adjust to changing ideas and different perspectives** about managing human-environment relationships.

Our teaching strategies

Students in first year should be **given opportunities to explore a variety of contexts and formulate their own standpoint/position**. We can have the students explore traditional ideas in current contexts or ask them to focus on change over time in particular spaces and places.

Field work can also provide opportunities for exploring the multiple perspectives of places, in place. Field trips to contested or complex sites can raise their awareness of different perspectives. Simulations and augmented reality case studies can be used when field trips are not possible.

Example 1: Thinking about key concepts and perspectives in Geography

Using an audience response system such as Socrative, give students a number of multiple-choice questions to assess their understanding of key concepts and perspectives. Students vote individually on the correct answer for each of the multiple-choice questions. Then each student finds another individual that voted differently on a particular multiple-choice question and tries to convince the other person of their point of view. Finally, all students revote.

The lecturer/tutor then asks those who answered 'A' for their rationale and asks students voting for 'B' to do the same etc. After the discussion students are told the correct answer and why. This activity promotes critical thinking and engagement of students even in a large class.

Example 2: Field work – urban change using augmented reality

Structure the field trip as a self-guided small-group field visit with a briefing and debriefing session. Students use the augmented reality app, Aurasma, to overlay archival photographs onto the contemporary urban environment.

Students observe the urban change and are invited to reflect on the processes behind the changes they observe (e.g. deindustrialisation, gentrification, urban consolidation, functional change in the urban environment). They take photos as evidence of the urban change.

This data then forms the basis of discussion in a future class and/or an assessment task.

FIELDWORK IS INTRINSIC TO GEOGRAPHY

What students need to know and do

Students need to **develop understanding of field work methodologies and field skills**, including data collection, organisation of field notes, use of field equipment, and different methods used in fieldwork.

Student barriers to learning

While students may enjoy field trips they **do not always appreciate the skills required for academically rigorous field work**. In addition, large first-year undergraduate class sizes may also restrict opportunities for academics to organise field-based learning.

Our teaching strategies

Field trips in small groups—linking theory to practice in specific spaces, places and/or environments through short field trips. **The field work should be participatory (as opposed to passive observation)**. Students can collect data or write a diary (written, photographic or video) during the field trip. They could be asked to simulate the role of a tour guide or create their own audio walks for a particular place. In order for field trips to be less intimidating, students could have a small, practice-based pre-field session on campus.

Case studies can be used to provide an introduction or even a proxy for direct field-based learning by allowing students to examine events and processes in real world contexts. Geo-technologies and spatial databases can be used to create virtual field experiences.

CRITICAL THINKING ABOUT SPACES, PLACES AND/OR ENVIRONMENTS

What students need to know and do

Students need to think critically and creatively about spaces, places and environments, and human interactions with these. They need to be able to ask and answer 'new' geography questions.

Student barriers to learning

Students enter first-year geography classes with preconceived understandings of geography. **When exposed to the complexities of the real world it may be difficult for students to grasp the many underlying concepts and theories**. Therefore they may be selective to evidence or features that support these pre-conceived ideas. Such selective processes may hinder critical and creative thinking in students.

Our teaching strategies

Guide first-year students in enquiry-based tasks, scaffolding their thinking using appropriately chosen questions and prompts. Provide them with tasks that call upon them to develop their own categories and modes of classification.

Carefully chosen questions can help them to think more broadly when undertaking case studies or field work. Linking these to real world issues can be effective. Ask students to come up with their own questions.

Debates can help students think about different perspectives. For example, students could debate planning or local environment issues from the viewpoint of different stakeholders.

Example 1: Field trip with scaffolded preparation and use of Aurasma

Students visit a suburb that has a large proportion of migrants from a particular ethnic background for a self-guided field trip examining positives and negatives of ethnic residential concentration. Students are prepared through a series of workshops on ethical field practice, background reading and using photos as data / geographic evidence.

At the site they use Aurasma-augmented reality videos of the teacher pointing out key features and asking critical questions about the area.

Example 2: Development of understanding of principles of location

Following lectures on economic geography, students are given a local yellow pages or can use online business directories to identify all businesses in two industries (other than agriculture). They are asked to locate the businesses on a map.

Students are then directed to answer three questions:

1. What location patterns are evident?
2. What is the most likely explanation for that distributed pattern?
3. Which principles of economic location do the location patterns best reflect?

Example 3: Analysis of built form, maps and the impact of government on urban form

In this tutorial, first-year students are asked to read a journal article about the creation of the Grand Boulevards in Paris. They are then asked to use Google Earth (street view) to locate one of the Grand Boulevards and take note of the built form and public spaces. They are asked to take note of the built form characteristics and vistas created.

Students then move to a hard copy map of their town/city and attempt to create Grand Boulevards there.

They are then asked to note the differences between society and governance in Australia now compared to France at that time. This then leads to a discussion about deliberative democracy and community consultation.

EVALUATE AND SYNTHESISE VARIOUS VIEWS AND ARGUMENTS

What students need to know and do

Students need to be able to evaluate and synthesise various and often complex explanations and arguments from a range of sources. This requires them to **move beyond their opinions or judgments about issues** to using evidence and critical assessment of competing arguments.

Student barriers to learning

Geography is a broad and varied discipline incorporating many theoretical and methodological perspectives and approaches. This variety of perspectives and approaches can be particularly difficult for first-year students to grasp.

Students can also have difficulty in assessing and evaluating the authority, validity and context of evidence and source material, particularly in the face of sometimes complex and contradictory data. **They may also lack confidence in articulating their own argument**, thinking that lecturers want their own ideas presented back to them, or that they might have the 'wrong' argument. In contrast, some students may have their own opinion but are not able to substantiate it with appropriate evidence and critical analysis.

Our teaching strategies

Provide opportunities for students to appreciate and evaluate different points of view. They can analyse texts with multiple and diverse perspectives. **There are often issues in the press or media that are current and where they can be asked to explore the opposing arguments.** We can ask them to role play or participate in a panel representing different points of view.

Lead students in discussing the connections and disconnections between their opinion and an evidence-based argument. First-year students can learn to analyse the features of an evidence-based argument and analyse arguments in texts (written, verbal or media) or scholarly articles. Provide opportunities for them to learn to make judgements and provide reasoned explanations for those judgements.

We can design case studies that demonstrate the development and integration of alternative perspectives about an issue, highlighting connections and disconnections in geographical and other bodies of knowledge. They can learn in first year that diversity and difference in argument can lead to a better solution and should be seen as an opportunity for learning rather than a barrier.

Example 1: Problem solving

In order to understand complex problems, they could workshop a particular issue or real world problem over a number of weeks. In first year you might want to start with a local issue that the students are familiar with. Have them apply the problem-solving cycle (define problem, what do you know, what do you need to know, how can you obtain and apply new knowledge, resolve the problem, reflect). Discuss and model the questions they need to ask to address the complex issues and where to find data or information to inform them in finding a solution. They should also consider any ethical dimensions to solutions and problems. At first year you might need to explicitly structure the problem solving and provide the students with prompts and feedback as they go through the problem-solving process.

IDENTIFY SOURCES OF KNOWLEDGE PERTINENT TO ENVIRONMENTAL AND SOCIAL PROBLEMS

What students need to know and do

Environmental and social problems are complex. **Students need to identify sources of knowledge and approaches pertinent to understanding** and addressing particular environmental and social issues.

Student barriers to learning

Students **'don't know what they don't know'**.

Identifying relevant information outside their worldview and spheres of experience, and how this information might apply to particular social and environmental problems can be challenging.

Students need to be able to recognise the diverse sources of knowledge available to geographers. They may find it difficult to identify and integrate these multiple knowledges as applicable, even necessary to solving social and environmental problems.

Students may also lack familiarity with the many and varied approaches used by geographers to tackle complex problems.

Our teaching strategies

Case studies can be used as a way of helping students experience problem-solving on a small scale. They can be asked to **view a problem from multiple perspectives and evaluate the different points of views** of multiple stakeholders. They can then explore the approaches that a geographer might use to tackle or investigate the problem.

Example 2: Role play – using different stakeholder perspectives

In a workshop students are given the opportunity to debate a development application for a Material Change of Use (MCU) for land in a moot court situation with an expert guest sitting as judge.

Different stakeholder groups of students and expert witnesses are presented by different groups of students; each student is expected to deliver part of their group's arguments. The morning is spent on preparing the case and the hearing takes place in the afternoon. Depending on the case, selected arguments for and against will be based on a range of environmental, social or economic issues.

ANSWERING GEOGRAPHICAL QUESTIONS BY ETHICAL MEANS

What students need to know and do

Students need to be able to think about their own ethical values with regard to specific social and environmental issues and also have the skills to recognise ethical issues in and across a variety of contexts. They need to be able to think about how different ethical perspectives might be applied to geographical questions and consider the ramifications of alternative actions.

“Developing ... ethical thinking [is] central to the geographer’s art... for a discipline whose concerns range across such contentious issues as climate change, sustainable development, poverty and inequality, ... developing an ethical behaviour ... is central to the maintenance of geography’s reputation as both natural and social science. Not only does it help reinforce the reliability and validity of what we ‘do’ and what we ‘know’, but it attunes us to the particularities of place and to the impact our agency as geographers can have on place.”

(Whalley et al., 2011, 386)

EVALUATING DATA AND EVIDENCE

What students need to know and do

Students need to be able to make judgments about what data is necessary, available and reliable. They also need to be able to draw appropriate conclusions using data from relevant, credible and defensible sources and identify any limitations in data and conclusions.

Student barriers to learning

Students may not be fully equipped with the mathematical, mapping, digital technology and other skills needed to evaluate which data is relevant nor to interpret different types of geographical data. A lack of awareness of available data sources or lack of skill in using data may cloud students’ ability to be aware of the limitations of conclusions.

Our teaching strategies

Introduce first-year students to the concepts and skills of research, research methods and data collection. We can show them how and where to access or collect appropriate data as a basis for problem solving. We can provide them with skills for evaluating the relevance of data.

Small group activities can be used to collect ‘real’ data to analyse and discuss in class. This could be linked to field-based practice and research or the use of geographical databases. They could be asked to build on a continuing project where each class group adds to the data collected in previous semesters.

Student barriers to learning

Students often experience difficulties in understanding the scope, range and import of ethical issues in Geography and in conducting geographical research.

Our teaching strategies

First-year students can be guided to reflect, think and talk about their own behaviours and practices in relation to ethical questions and issues. They can be introduced to examples of good ethical practice in geographic research and be asked to answer questions about ethical issues in case studies, assessments or tutorials.

Whalley, W. B., Saunders, A., Lewis, R. A., Buenemann, M. & Sutton, P. C. (2011). Curriculum development: Producing geographers for the 21st century. *Journal of Geography in Higher Education*, 35(3), 379-393.

Example 1: Environmental debate

Students watch a video or are given a presentation on a particular issue, for example, the status of African elephant population numbers and their impact of the environment. Discuss issue: Too many elephants in relation to carrying capacity leads to loss of vegetation and ultimately deforestation.

Students then debate (two groups)

- Should we protect elephants?

Further ethical question: Should we use ivory from the culling of elephants to sell, which is contrary to CITES criteria but will make money to continue protecting the elephants?

Example 2: Analysis and argument using data as evidence

Students work in small groups and engage with readings and census data to establish demographic trends. They then debate a particular topic about Australia’s population future and its likely distribution. At the end of class they are asked to present a 500 word summary opinion paper.

Example 3: Field work vs Census data

In a lecture, introduce a suburb or local government area that is in the popular imagination. Produce, for the students, a transect, north to south, of that suburb, plot census data (e.g. birthplace). Provide students with a form that guides them to look at the landscape as a geographer and record their observations (manifestations of culture).

After the field trip, have them share their observations in small groups. For example, they could discuss the birthplace groups that were present in the data that were not observable in the field and vice versa?

Question the students about why the two techniques (mapping and observations) provide different data?

Reflect on this learning and how it may be applied to other areas.

ORAL COMMUNICATION

What students need to know and do

Students should become comfortable with speaking and presenting in and to the class, using and explaining the terminology of the discipline. They should be able to research, prepare and present on a topic or issue. They may also need to learn about presenting to different academic and non-academic audiences.

Student barriers to learning

First-year students are often worried or intimidated about presenting in class. They may not understand how important communication skills are in furthering their ideas and in influencing audiences. They may be **unaware of the need to change strategies when dealing with different audiences.**

Our teaching strategies

Ensure that the ways in which geographical questions, perspectives and research contribute to public/social policy, politics, employment and civil society are explored and discussed systematically. Use small group or online activities to have students set up a glossary of terms used in **Geography with explanations that are suitable for a non-specialist audience.**

Design activities and assessment tasks to incorporate presentations to different types of audiences. Work up from informal class presentations and small group discussions to full class presentations for assessment. Provide opportunities for students to present and gain feedback prior to their final presentation or written assessment.

WRITTEN COMMUNICATION

Example 1: Being asked to go to the heart of the matter in an oral presentation?

PechaKuchas (www.pechakucha.org) help students frame interesting informal talks. Ask students to frame a talk and display, using a PechaKucha PowerPoint template of 10 blank slides with an automatic 20-second change over. Students have 3 minutes 20 seconds to get to the heart of an issue or question and make the audience care about it. PechaKuchas can also function well as a preliminary step to the framing of an essay.

Example 2: Analysing different perspectives

Provide students with two or three articles with different perspectives on a particular issue. Have them work in groups to identify the argument and evidence in each article. During this exercise the lecturer/tutor should model the difference between opinion and an evidence-based argument. Then ask the group to investigate the issue further and bring resources back to the next class to share with their group. They then share those resources in the next class and together rehearse writing a model argument.

Each student then writes a short article explaining the different points of view and putting forward their own opinion with supporting evidence.

What students need to know and do

Students need to learn about the varying genres of texts for presenting to different academic and non-academic audiences. At first year **they should also understand referencing and academic integrity issues.**

Student barriers to learning

Students do not necessarily come to university with an understanding of how to write essays, reports and/or other formal assignments. **Often they have not been taught how to reference properly.** Therefore, they may not be familiar with, or do not fully understand, the principles and concepts of academic integrity.

Our teaching strategies

We should view improvement of students' writing as our responsibility as teachers and let students know that we value good writing and correct grammar (as well as content). **We may have to teach students how to write and reference** and/or bring in academic learning skills staff to assist students.

In this process we should model and use different forms and styles of written tasks. Even social media platforms can be used by students to practise communicating geographic perspectives.

We can provide students with tips on good writing practices supplemented with models, annotated exemplars and guidance through the writing processes required for assessments.

Scaffold the learning-to-write process for major writing tasks/assessments. Allow students to practice brief writing exercises in class or have them work on small writing tasks in groups.

TEAM SKILLS

What students need to know and do

First year students need to learn to work effectively in teams to combine their learning of discipline-specific knowledge and approaches with the practical skills that will be of use in the workplace and field.

Student barriers to learning

Students studying at university often find team work challenging particularly when team members have different class timetables, live some distance from each other, have varying commitments, different personalities, aims and working styles. Together with differing prior conceptions and understandings of the discipline of Geography, these challenges can impede geography students' understanding of the benefits of working in diverse teams to enhance geography outcomes and students' willingness to actively contribute.

Our teaching strategies

Create a safe learning environment in tutorials and workshops and use collaborative group tasks to teach group skills in:

- devising a code of conduct for their group
- Identifying and recognising peers' strengths
- assigning roles
- auditing their own skills and those of team members
- acknowledging the positive strong contributions of group members after any group activity

Review the importance of team/participatory approaches to problem solving including appreciating different viewpoints of team members and the value of diversity in decision making.

Structure tasks and activities to identify what each individual student has contributed while still requiring them to work together. For example, guide students to work as a team on a structured research project using existing data with different students in the group investigating different aspects. Then have them present as a group. Enable a classroom or online place where students can venture half-formed thoughts. Students can be encouraged to see the value of considering different perspectives by working in small groups with each of them playing the role of a different stakeholder.

Example 1: Team-based learning and team building – the first class

This activity helps to establish the tutorial as a safe and active learning space. The task is a fun and educative way to understand the

- city as a spatial and temporal concept
 - key city geographies (economy, zoning, security, energy, transport, etc.)
 - distinctive public/private spaces and forms of a city
 - global city as a unit of analysis where cities are complex systems with compound issues based on histories and urbanisation
 - comparative dynamics of global cities, globalisation and glocalization
1. Whole-class tutor-guided discussion: Using the 'Airport city' idea, students are guided through a discussion comparing and contrasting (global) cities versus airports as systems and units of analysis (as above). ~ approximately 30 minutes.
 2. Activity as icebreaker and team building: Introduce first-year students to each other by forming, norming and storming with a view to their upcoming team assessment. ~ approximately 10 minutes.
 3. Team activity and presentations: The class is divided into four thematic groups, with approximately four to five students per group. Approach, Departures, Arrivals, Airside (if more than four groups then you can have duplicates or add 'Airport surrounds' as another group). Groups have ten minutes only to plan, prepare and present a five-minute role-play or creative piece (song, poem) about their designated area in the airport showcasing the relevant key element of theory and practice. Students ask questions and provide feedback to each group, developing understandings and relationships ~ approximately 40 minutes (10 prep + 5 per group).

Example 2: Team Role Play – students play the role of different nations examining an issue (e.g. climate change refugees)

Week one: students are divided into small groups of approximately eight with a facilitator (tutor) to review / audit the groups' knowledge about an issue, for example, climate change and climate change refugees. The emphasis is on identifying gaps in knowledge and getting students to delegate information gathering tasks.

Week two: Students work with the facilitator but are more self-directed. The group has been allocated one of four national delegations that they will represent in a role play / scenarios of an intergovernmental meeting in week three. Students audit their knowledge about 'their nation' and its relationship to the issue (e.g. climate change refugees), identifying gaps and allocating tasks. They reflect on the perspectives/views of the other three nations

Week three: Each member of the group is in the role of a key 'actor' for their nation. The groups come together for a meeting of the four nations. Each nation offers an opening statement and engages in negotiation with the aim of seeking co-operation/ collaboration between the nations in addressing the problems relating to the issue (e.g. climate change refugees).

REFLECTION

What students need to know and do

Reflection is critical to questioning and refining geographical thinking and practice. **Learning to think and reflect is central to improving learning and practice in a field-based, applied discipline such as Geography**, where field experience must be integrated with academic study.

Student barriers to learning

Students are often concerned with completing a task and **may not see the purpose or value in reflection on their task completion and learning**. Some students do not know how to constructively reflect.

Our teaching strategies

Teach students how to reflect in a scholarly way. The reflection should be appropriate to the learning and reflective of the processes of the specific activity being undertaken. Reflections at first year can be more structured with prompts or questions to stimulate the students' thinking. Mock interviews can be an interesting way of having students articulate their learning and think about the skills that they have developed.

Reflection can be used to make students aware of the skills that they are learning through the study of Geography.

A log book or e-portfolio can be used from first year to reflect on their experiences and learning (both on and off campus). This can be used in later years to consider the changes that they have seen as they progress.

Self-assessment, peer assessment and peer tutoring can be used to help students evaluate their own work and that of others. This should be taught and scaffolded in the first year so that students are given the skills of critical reflection and critical evaluation that they can apply in the later years and in their future work.

HOW GEOGRAPHERS WORK AND THINK

What students need to know and do

Students need to **learn what different types of geographers do** and the range of professions, roles and industries that require geographers and geographical knowledge and skills.

Student barriers to learning

Geography has both natural and social constituents, which means that the range and scope of professional geographical work is very broad. Outside the university setting, **geographers are scattered and work individually, in small groups, or as members of larger interdisciplinary teams** for governmental agencies, businesses, or private organisations. This relative invisibility contributes to a more general lack of awareness as to 'what geographers do'.

Our teaching strategies

Include consideration of the role of geographers and examples of ways in which geographers have shaped the world for good and where they have failed (and why) in first-year geography subjects. We can dedicate time within lectures, tutorials and seminars to discuss Geography as a discipline and as a career.

Inviting geographers working outside the university as guest lecturers can be a powerful way of introducing first-year students to the profession.

Field work and case studies are other ways in which students can learn about what geographers do.

Example 1: What do geographers do?

Take examples of issues that are currently in the news and ask the students to discuss in small groups what role a geographer could play in solving the problem or investigating the issue. Choose examples that show the variety in geographical sub fields, concepts and roles. Follow this up by getting the students to discuss how a geographer might investigate or analyse the event or issue, and with whom. Model how this would occur. What different questions can be asked? How could these questions then be researched? What would constitute evidence? Who would you need to work with? Who could use the results of these inquiries and why?

Example 2: Reflection on learning – letter to next year's students

Ask this year's students to write a letter to next year's students reflecting on what they have learned as students of Geography. They can provide advice for the students studying Geography in the next year. This should not be an empty task, but one that carries over from year to year with the following year's students being provided with the letters or extracts from the letters.