Welcome to the real world of geography! This edition of Geography Matters reflects the relevance of our subject - past, present and future. How is geography relevant in the world of work? The experiences of five former students will no doubt inspire present and future school geographers. As ever, there are helpful articles here for teachers and students studying A level geography. Alan Marvell explores the real world of garden cities in suburbia and Simon Oakes reflects on our place in the global economy. Ever the global geographer, Helen Hore offers insightful cultural perspectives from Malaysia. Richard Kotter’s different view of culture also brings together past and present and looks to the future. Finally, the geographers at Comberton College encourage us to embed GIS across our geography teaching, and Rachel Adams gives practical advice on how to use Story Map. What a bumper edition! Many thanks to all our contributors.

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Chair’s Notes: A call to arms?

Iain Palôt

It is that time of year again, CONFERENCE! In the city of Sheffield, city of steel Owls and Blades and the Full Monty and in our 125th year, much celebration for the subject association for GEOGRAPHY! The GA was formed in Oxford in 1893 to support the teaching of Geography. Most importantly given recent world events, from the beginning it was an association that women could join. Throughout its 125 years the GA has been at the forefront of advocacy for the subject across all age ranges and has supported teachers through workshops, conferences and its many publications. Plans for the immediate future see no diminution of those efforts, largely through the work of the band of volunteers and activists drawn almost exclusively from the GA membership and supported by the HQ staff.

Are you involved with your local branch? Do you write for Teaching Geography? Or any other publication? Do you take Barnaby on holiday with you? Do you liaise with your feeder schools and benefit from joint geographical projects?

The future looks challenging, particularly the Post16/HE phase. There are a raft of issues that need our attention but when wasn’t there? Here, in no particular order and all of equal concern, are the questions that the P16/HE PC are currently discussing:

- Do all university Geography departments realise that the A level specifications have changed? Are they engaging with their local schools and are they reviewing their undergraduate programmes?
- Why have the number of unconditional offers increased compared to previous years? This is a much wider question but can have the effect of demotivating students just when we as teachers are asking for that final extra push.
- Have the changes at KS4 impacted on the uptake of the subject and what might the implication be for numbers at KS5?
- Are the numbers of geography graduates dropping or is it just in one or two places and what is the implication for the supply of teachers in the future?
- How big or small does an A level class have to be in order to survive on the timetable in the current climate of financial constraints?
- To what extent do the questions in both AS and A level papers reflect what members of ALCAB had in mind when they determined the content for the new specifications?
- How have teachers and students managed the NEA this year, and what lessons can be learned for the next cycle?
- What ever happened to the ALCAB subject content committee?

The P16/HE committee are very interested to hear your thoughts on all or some of these issues, many of which are likely to be discussed at our Panel discussion on Friday afternoon. Meet us there or on the stand or email Iain Palôt at iesgrionettes@yahoo.co.uk. But above all have a great conference!
Real World Geographies
This section of Geography Matters focuses on how geography is valuable in the real world. Our thanks go to all the contributors who have taken their geography into their workplaces.

Young Change Makers for the Sustainable Development Goals
Georgia Davidson, Comberton College

On Wednesday, 8th November 2017, six students from Comberton Village College Sixth Form attended a day of seminars concerning the UN Sustainable Development Goals, hosted by Anglia Ruskin University in conjunction with the Global Sustainability Institute and SEED.

This was a fantastic and valuable experience. We first heard from George Rosenfeld, a delegate from the 2016 UN Youth Assembly on the Sustainable Development Goals. He spoke about his work with WaterAid, which he began at the age of 12, and about other young people who inspire him. This in turn was incredibly inspiring for us, because it was very clear to see how youth can make a difference. There was also an introduction to the Sustainable Development Goals, and how these are categorised into economics, social, and environmental goals, but also interlink to create a vision of a truly sustainable future. This vision of sustainability is a large part of Anglia Ruskin’s ethos, and this was outlined in talks about sustainability on their campus and in curriculum, research and culture.

The UN Sustainable Development Goals are also relevant to the AQA A-level geography we are currently studying, on both coastal systems and landscapes with sustainable approaches to coastal management, and in Changing Places, the ways in which external agencies have used sustainable methods in order to rebrand a place.

After a lunchtime fair with different sustainability organisations, the afternoon focused on Open Space Technology, a technique to facilitate conversations. The Comberton students were involved in conversations about education and food sustainability, among other issues.

This experience developed my overall geography knowledge, not only by providing real life accounts of the subject matter, but also by being encouraged to apply my knowledge to areas I’m passionate about. As a result of this seminar, I have become interested in sustainable education, and how it can improve the prospects and development of a place and a people. This is a topic I think should be considered more, and hope to learn about in more depth in the future. This all stemmed from the work with Open Space Technology, which lead to incredibly fruitful conversations, and gave us tools to reflect on the impact youth can have on our world.
Bridging the classroom and the real world: the real geographies of Emergency Planning

Hannah Gowling

Geography is the key link that can bridge the classroom to the real world - it is more than just an optional choice within education. Outside of the classroom geography enables and causes the world to revolve and holds the power to change it. The question is, how are we going to change the world for the better and inspire future generations to do the same?

Whilst the educational curriculum explores human and physical geography, the links between how students can follow geography into an array of careers are not always as obvious. However, aspects of geography are evident within every career whether it involves air miles, politics, community engagement or banking to name a few, it all relates back to geography. As geographical issues are increasingly becoming part of everyday conversations and debates across society, the opportunities are endless. Regardless of whether someone utilises geography to become a Flood Resilience officer, a humanitarian aid worker, or a town planner, geography holds the potential to make a real difference in the world.

After being unsure how I would use geography within my career, my personal pursuit of exploring geography was channeled into an interest in disasters and development and emergency planning.

As the International Federation of Red Cross and Red Crescent Societies highlight, disasters related to climate, hydro and meteorological hazards, flooding, storms, droughts, and earthquakes are increasingly threatening societies across the world, (IFRC, 2016:244). Across the UK, communities are threatened by hazards, including flooding, transport accidents and severe weather. The National Risk Register is defined by the Civil Contingencies Act which outlines how the UK should be protected from emergencies and who is responsible for this protection (Cabinet Office, 2004). Although planning and responding to emergencies may be perceived as the responsibility of emergency responders, it involves intricate networks of stakeholders that contribute to protecting the public and preserving the environment, including:

- Emergency Services: Police, Fire, Ambulance
- The Environment Agency
- Marine and Coastguard
- Utility Services: Power, Water, Gas

The co-ordination of the stakeholders contributing to emergency planning in the UK is the responsibility of emergency planners. The fundamental components of emergency planning involve preparedness, response, recovery and mitigation (Alexander, 2016:4-5). These four components are integral parts of the emergency planning cycle which strives to improve how emergency situations are prepared for and responded to (Figure 1).
Figure 1 demonstrates how emergency planning is a cyclical process that should involve continuous improvement and adaptation as threats and the vulnerability of society changes over time (Alexander, 2016). Emergency planning also involves carrying out scenario exercises to enable emergency plans and responses to be tested to ensure emergency plans, planners and responders are adequately equipped and prepared (Adey and Anderson, 2011).

Within workplaces and organisations, emergency plans are also vital. Business continuity plays an important role within emergency planning to ensure that businesses can continue to function in an emergency, reducing the impact on business and minimising disruption (Alexander, 2016).

Personal resilience and preparation for emergencies is equally as important. The public can proactively download apps on mobile devices such as the citizen aid app, store in case of emergency numbers on their phones and explore emergency services and council websites and social media pages (Gowling, 2017). Additionally, if an individual or business is at particular risk from flooding you can sign up for flood warnings and alerts (GOV.UK, 2017). On a local level, emergency planning stakeholders are co-ordinated and supported by emergency planners and Local Resilience Forums who seek to protect local communities (Cabinet Office, 2017b). Part of their role involves developing Community Risk Registers for local communities to assess and highlight potential local hazards to improve resilience to emergencies and encourage proactive attitudes to emergency planning.

In my recent Masters research I explored public participation with emergency planning across the North East. The findings highlight that although ways for proactive public preparation for emergencies exist, they are predominantly under used and unrecognised (Gowling, 2017). Although Community Risk Registers are publicly available documents, the findings highlighted that there was a lack of awareness of Local Resilience Forums amongst participants restricting access to localised support and guidance (Gowling, 2017). I also found that participants suggest that public participation with emergency planning could be improved by schools educating students about how to strengthen resilience and prepare for emergencies. The classroom holds the potential for individuals that could not only change the future but save lives.

It is evident that geography is a highly versatile subject that enables individuals to follow their interests and passions with the potential to benefit the communities and environments around us. My geography teachers and lecturers inspired me and as a result I am today following my interest in emergency planning. This is just one example of how geography creates endless opportunities and avenues of exploration not only in the classroom but also in the real world. As incidents such as flooding, terrorism and climate change have the potential to influence each and every one of us, our understanding of geographically related occurrences should be stimulated and developed in the classroom and applied outside. So also should an understanding of how we can prepare and improve our personal resilience to emergencies. Geography must use the classroom and links to the outside world to encourage and inspire individuals with the
potential to improve and protect society, unlocking the potential career avenues geography offers to students. Geography must encourage change and resilience both within classrooms and in the real world.

References
Gowling, H. 2017. Exploring the nature of public participation across the North East of England, UK. Northumbria University MSc Dissertation. Contact: hannah.gowling@gmail.com

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**A Journey towards Emergency Planning**

Reuben McGarry

Emergency Planning Assistant, York City Council

As I write this article I have begun work with City of York Council as an Emergency Planning Assistant tasked with developing community resilience in the city, in particular in relation to flood risk.

I studied Human Geography with Mathematics at Keele University. During my final year, I undertook the module ‘Inspirational Landscapes’ which explored how geography links with other academic disciplines. By tying together the two ‘families’ of physical and human geography I examined the causes, impacts and consequences of the 2010 Haitian earthquake: how tectonic activity led to the earthquake, the fragility of the country, and the political context of UN intervention. I used qualitative data collated from research articles and monographs, non-governmental organisations and real life accounts to explore the cultural, political, economic, and health consequences of the disaster.

I also had the opportunity for work experience at Central Bedfordshire Council, to undertake Emergency Planning, and in 2017 this led me to a Master’s degree in Disaster Management and Sustainable Development at Northumbria University. A module on ‘Integrated Emergency Management’ provided me with a platform to further my understanding of the legislation underpinning emergency planning within the UK. During the Masters course discussions with individuals of different nationalities, cultures, and experience empowered me to develop my academic, personal, and professional capabilities. I became
secretary of the student-led Disaster and Development Society, culminating in running a stand, with fellow students, at the UN International Strategy for Disaster Reduction conference in Geneva in January 2016. My Masters dissertation was a study exploring how the Emergency Planning profession supports small and medium sized Businesses (SMEs) in building resilience.

**Career Development**

My first professional exposure to emergency planning was as an Emergency Planning Support Officer within the NHS in Essex. This included work on the threat of terrorism within the UK and the development of a Marauding Terrorist Firearms exercise. My next step brought together my geography and developing professional experience by working for Yorkshire Water. This utility is classified as a ‘category 2 responder’ which means, in layman’s terms, a statutory duty for utilities to prepare for emergencies specific to their operation and to support other emergency services, Environment Agency, and local authorities.

I was based in the 24/7 control room referred to as the ‘heartbeat’ of Yorkshire Water where I developed first-hand knowledge and experience of emergency planning. This involved understanding on how the four Yorkshire Local Resilience Forums bring together emergency planners (including the emergency services, Environment Agency, local authorities, and utilities) to prepare for and respond to emergencies. In response to the 2015 Floods across Yorkshire, I supported the organisation’s Flood Risk and Engagement Team to update Vulnerable Asset Plans. Each plan collated information for an asset at risk of flooding which could then be used to prioritise resources and appropriately prepare for wet weather across all potentially affected sites in Yorkshire Water’s region.

**City of York Council: Community Resilience Building**

Following the 2015 floods which severely affected York city, the York Independent Flood Inquiry produced a number of recommendations around public engagement, education and resilience. My role currently supports the fulfilling of these recommendations. Key aims of the programme are increasing the community plans through events with community groups and working closely alongside partner organisations, especially the Environment Agency. The likelihood of high impact, extreme weather events is increasing as a result of climate change and severe weather emergencies such as the December 2015 flooding may become the ‘new normal’. I hope that York is never impacted as severely by flooding again but if it is I feel confident that I will have supported communities to be more prepared and ready to mitigate the effects of flooding.

**Conclusion**

I am proud of how my geography continues to influence life even after leaving formal study. I look forward to being able to share how I have helped to support York in increasing community resilience citywide. I am grateful to my geography teachers, lecturers, fellow students and mentors who have provided intellectual discussion during my geographical journey to the young professional I am today.
Transport Geography - the path to somewhere

Jonathan Barlow BA (Hons) MSc MCIHT

Before writing this article, on recommendation from Richard Kotter my mentor at Northumbria University, it was never a conscious consideration to identify as a Transport Geographer. However, upon reflection the number of geographical skills I use regularly became increasingly obvious.

It wasn’t a conscious initial decision, as a third year geography undergraduate, to enter the transportation and engineering sector. At the height of the last recession (circa 2010) and with no significant employment prospects on the horizon it made sense to continue training into a more specialised field. The assumption at the time was that more qualifications equalled better employment prospects. To an extent this was true but it was significant perseverance and proactive activities in other projects that also assisted and finally got me to clinch a professional career.

Two years after completion of my BA in Geography and an MSc in Transport Planning, I became a Transport Planner within a professional workplace. I have also worked in the public transport sector in Peterborough, before returning to Tyne and Wear.

The cultural difference between a desk-based working environment and being a student was vast. To ultimately succeed it was important to listen, observe and contribute, particularly in the first two years of work. To understand a problem it was “important to undertake a lot of reading” – a line from an audio recording and a sadly departed academic who springs to mind occasionally, and whom I never had the opportunity to learn from in person. It was also important to recognise the three key themes of the Geography discipline;

- Space
- Place
- Scale; and
- movement / flow

All of these key themes are at work throughout the Transportation Industry and used, subconsciously or otherwise, to conceptualise a plan or intervention. In practical terms an intervention involves changing the built environment and how people interact with these alterations, for example through promotion and marketing campaigns to encourage behavioural change.

To date, I have had the opportunity to work on a range of projects - from the extremely small scale, such as the installation of dropped kerbs (assisting those with mobility impairments to access shops and services) to delivering a major infrastructure project improving journey times for thousands of travellers. The process for developing schemes is similar to a research assignment:

- Conduct a tailored literature review;
- Developing an evidence base;
- Assess the potential solutions and presenting them to our clients for delivery.

Once this is achieved a scheme may be developed and if we as professionals are very lucky we also get to see the effects of our intervention following the initial assessment; this of course is the best bit.
Heading out to site when the tarmac was still steaming to see a road safety project that I had taking from an initial brief to post-scheme analysis is probably one of my best career memories to date. While similar to university study, transportation and engineering also differs and is arguably more fun in many ways. Instead of waiting to analyse the effects of an intervention, describing a problem, adding and evaluative words and ultimately producing a lengthy paper, I and others in the public and private sectors alike do not have the luxury of time. We are not usually required to observe problems; we are employed to have foresight and to develop schemes which address major issues, such as development control, highway capacity, promoting sustainable travel and highway pollutants; all the while managing the ‘bottom line’ and third party expectations.

Working within this industry is to me also about doing more than your core hours and relaxing on an evening. It involves being active within the local community and contributing to the development of new discourses, developing young professionals and yourself too.

To that end, and I recommend this to everyone, set yourself a major personal professional challenge each year beyond what is included in an annual appraisal. As a result of this I have managed an extracurricular fact finding trip to The Netherlands; 2 trophies for efforts on a Regional/National scale; delivered Corporate Social Responsibility Days; and presented at a national conference and local university. I am also on the branch executive committee of the Chartered Institute of Highways & Transportation. Whilst these are excellent for the CV and demonstrate that you have done something beyond working at “An Organisation” for several years, they also allow you to develop a series of wider interpersonal skills beyond those which you pick up both in the workplace or within your extremely diverse and versatile Geography degree.

Although not the sole reason, the geography syllabus, and most importantly the people within it, allowed me to get to where I am today., I took modules focusing on the quantitative and analytical aspects of physical geography which helped develop more skills than another round of essay writing. Between this, the ‘education’ received while working part time, and pursuing other activities, I gathered together a well-rounded set of experiences. Combined with a proactive attitude these were important personally for developing as an individual but also in achieving that first hard-to-obtain “graduate job”. Your degree and your passion for the course will of course assist, but it is ultimately like a set of household tools. How they’re used to deliver items of value ultimately matters more than how or where they were acquired.

My industry of highways and transportation has changed significantly over my six-year career so far, and continues to evolve. With increasing development, and the challenges that arise from this, the industry and society continue to need suitably qualified, experienced and motivated people to address them appropriately and sustainably. Arguably, geographers are some of the best, multi skilled and passionate people to ensure that the right projects are delivered with residents being the ultimate beneficiaries.

To paraphrase a slogan from a famous film: “The world is yours”. Have a go at co-shaping it.
From studying the world to travelling the world: Is Geography useful for a career as Cabin Crew?

Sian Bonnick is interviewed by her former teacher, Hafsa Garcia

A qualification in Geography may not be required for a career in Cabin Crew, but does it help? And will it further your geographical knowledge? Sian Bonnick certainly thinks so! After completing college in 2017 (including an A level in geography), she secured a position flying long-haul with British Airways (BA) and with it, the opportunity to experience first-hand some of the places she had spent so many hours learning about in class.

“I decided to apply for this position because I have always been fascinated by travel and aviation”, Sian explained. “This was the perfect way to do both. It also gave me the opportunity to visit and learn about places I would have never thought of visiting”

Sian only completed her training in January 2018, yet already she has visited Ukraine, been on safari in Johannesburg and soaked up the sun on Miami Beach. “I always take the opportunity to explore, whether it’s a wildlife safari or adventuring into towns and cities.”

As she excitedly reels off the list of countries and cities on her schedule for this year (St Petersburg tomorrow, Shanghai next week), it is clear how easily Sian’s role is improving her locational knowledge, something which seemed like hard work – remembering place-specific detail – at A level. But travelling the globe and increasing her knowledge of far flung places, while it may be the most obvious geographical link to a career in Cabin Crew, certainly isn’t the only one.

I asked Sian if she thought her knowledge of geography had helped her to secure her role with BA. “Yes, I believe it did’, she responded, ‘I was able to demonstrate an understanding of the challenges faced in different parts of the world and the safety precautions airlines need to take as a result - political issues and conflicts or natural challenges, things like climatic or tectonic hazards. It gave me an insight into what to expect when visiting different places.”

To prepare for her role, Sian had to undergo six weeks of intensive training, with lots of independent study and exams. “My experience doing A levels definitely helped with that”, Sian recalled. “Everyone else seemed to have forgotten how to study! There was also some human geography in it - cultural norms, what is deemed polite in certain cultures and what can be deemed as rude. It also covered issues such as the risks of staying in places with high altitude, the effects that can have on the body.” I asked Sian if she found this knowledge of geography useful in her role as Cabin Crew. “Yes, I believe it is. I am able to help customers with any suggestions of places to visit in that county. Even if I haven’t been there myself my passion for geography enables me to share knowledge that I have.”

Sian also talked about studying health issues at A level and how she’s glad she has some understanding of infectious diseases, where they are located and how they can spread. “I remember learning about that
horrible disease, leishmaniasis, how it’s only in certain countries like Brazil and how you can get it if you’re bitten by a tiny sand fly. I think this is something most people would be unaware of and they would think you only need to be careful of mosquitoes.” However, when I pushed Sian to remember anything else that she’d learnt at A level that might be useful she admitted that one of the challenges of the job for her was that she missed studying. “I am really enjoying this job and I am learning a lot” she explained, “but in the future, I’d like to consider a different role in aviation that involve more academic study, such as being a pilot”

Before she left, I asked Sian if she had any advice any advice for other students who are interested in a similar position. “It’s an amazing way to see the world” she responded. “You are working and then being able to see places you would never think of going. Make the most of it. You are only young once. Don’t look back. I found it hard being one of the only ones not going to university, but you should follow what you want to do, even if it’s different to everyone else.”

Sian is documenting her experiences through a blog, which you can check out here: https://throughsianseyes.wordpress.com

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Who are the Post 16 / HE Phase Committee?

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There is increasing pressure on planners and housing developers to create more homes. The UK’s population is projected to reach 67.6 million by 2021 and increase further to 71.8 million by 2031 (Barnes, 2012). There continues to be a shortage of housing as the need for additional housing in England is estimated between 232,000 and 300,000 dwellings per year (Parliament, 2015). With increasing demand for housing, the suburb may be regarded as a panacea to solve the present housing shortage (Dorling, 2015). Government has begun to increase the supply of new housing: between 2016-2017 183,570 new homes were built in England, the highest figure since 2007-2008 (Department for Communities and Local Government, 2017). In January 2017 the Government announced that there would be 14 new planned developments which will comprise of between 1,500 and 10,000 homes along with three Garden Towns which are set to deliver over 10,000 homes each. These are in addition to the Garden Cities and Towns already being constructed in Bicester, Didcot, Ebbsfleet, North Essex and North Northamptonshire.

At the turn of the last century the Garden Cities of Letchworth (1904) and Welwyn (1921), designed by Ebenezer Howard and Raymond Unwin, helped to establish not just a series of picturesque housing estates but also to reshape where and how people live. Howard’s objective of combining the best of town and country living was expressed in his diagram of ‘The Three Magnets’ which first appeared in his book To-morrow: a Peaceful Path to Real Reform (1898) and later republished as Garden Cities of Tomorrow (1902), see Figure 1. Each magnet represents ‘Town’, ‘Country’ and his new community ‘Town-country’, with the advantages and disadvantages superimposed on each, see Figure 1. The idea was that people would be drawn to the strongest magnet that exerted the greatest force, in this case the ‘Town-country’ magnet: ‘Town and country must be married, and out of this joyous union will spring a new hope, a new life, a new civilisation’ (Howard, 1898, p. 10).

The Garden City has underpinned contemporary suburban development by emphasising the simultaneous benefits of both town and country. Environmental concerns played a key role in Howard’s design, promising a clean environment, free from pollution and an abundance of parks and open space and can be regarded as being one of the first advocates of sustainable planning. Garden City design can be regarded as an approach to living and not a
specific architectural style, it draws its influence from the Arts and Crafts Movement of the late nineteenth century and its links with natural beauty, co-operation and community (TCPA, 2017). However, the Government does not specify what a Garden Village, Town or City should be, as:

“We do not consider that there is a single template for a garden village, town or city. It will be important for the new community to establish a clear and distinct sense of identity. We want to see local areas adopt innovative approaches and solutions to creating great places, rather than following a set of rules.” (Department for Communities and Local Government, 2016).

Initially this does not appear to be helpful however, it does provide an opportunity for developers and planners to create places that are based on local aesthetics that are attractive and well designed, which include garden city principles and emphasise a need to support and develop communities. The developments should also be built in response to meeting local housing needs and assisting first-time buyers.

It is unlikely that the new developments will look like the Garden Cities of Letchworth and Welwyn but will still adopt a design code that acknowledges the past. The use of neo-Georgian town house and cottage styles may provide an idyllic image of an imagined past but some question whether developers should be more audacious, using styles that reflect contemporary or even future aspiration (de Botton, 2006). New housing developments should make use of the latest technologies and building materials that are available while acknowledging historical and existing local character (TCPA, 2017).

Yet, one of the key aspects of the original Garden City idea is the value of the land, its ownership and use. Garden City designs acknowledged that the granting of planning permission increases the value of land, community owned assets would benefit from this uplift and as such the public would benefit through the provision of infrastructure and local services. Instead the current system appears to favour the land owner rather than considering the costs of realising the master plan and allowing the community to benefit financially (Biddulph, 2016).

The design concept of a contemporary Garden City is largely abstract as developers use various terminologies depending on their intended audience, as the words ‘garden’ and ‘village’ are often used interchangeably. The English village becomes mythologised reflecting an essence of traditional village life without an agreed meaning, which allows the term ‘garden village/town/city’ to appear contradictory and contested.

What is particularly interesting about the current plans is that large new settlements have a role to play in meeting the housing need of the country and that local areas are encouraged to submit plans “for new communities that work as self-sustaining places, not dormitory suburbs” (Department for Communities and Local Government, 2016, p. 5). As such, the nature of suburban development may change as self-contained developments are preferred.

Three new Garden Towns are to be located near:
Aylesbury, Buckinghamshire
Taunton, Somerset
Harlow and Gilston, Essex-Hertfordshire
The Garden Villages are:

Bailrigg, Lancaster
Culm, Devon
Deenethorpe, Northamptonshire
Dunton Hills, Essex
Halsnead, Merseyside
Handforth, Cheshire
Infinity Garden Village, Derbyshire

Longcross, Surrey
Long Marston, Stratford-upon-Avon
Oxfordshire Cotswolds, West Oxfordshire
Spitalgate Heath, Lincolnshire
St Cuthberts, Cumbria
Welborne, Hampshire
West Carclaze, Cornwall

In essence, the Garden City philosophy is being brought up to date, but the challenge is for it to meet the needs of an increasingly diverse population, be designed around efficient and flexible transport networks, employ sustainable initiatives and have less reliance on government funding. Houses should be constructed that meet the needs and aspirations of contemporary and future communities.

References
Port Talbot, India and China  
A case study of place connections and global systems

This case study provides teachers with an opportunity to help students forge synoptic links between two tricky new core areas of A level Geography courses - Changing places and Global systems and global governance.

Few places illustrate the challenges of interconnectivity better than Port Talbot in South Wales. Here, the fate of up to 15,000 workers - whose livelihoods depend directly or indirectly on Port Talbot steelworks - continues to hinge on the outcome of evolving global interactions between India, China, the UK and the European Union (with all the current uncertainty that that entails).

During the nineteenth century, South Wales mainly benefited from its global connections. The region grew into an important global hub for steel production during the ‘golden age’ of the British Empire. This success did not last though and by the 1990s, following the global shift of steel manufacturing to first South Korea and later to China, only two large integrated steelworks remained in South Wales. One of these two survivors was the Port Talbot steelworks which opened in 1954 with many locational advantages, notably its proximity to the M4 corridor.

Ownership of the Port Talbot steelworks passed from British Steel to the merged Anglo-Dutch Group Corus in 1999 and then to Indian multinational corporation (MNC) Tata Steel, following a £7 billion takeover, in 2007. The changing geography of the steelwork’s ownership during this time period was part of a far bigger historical picture whose elements included the UK government’s sale of its own industrial assets into private hands and the growing global influence of Asian states and businesses. At the time, commentators saw historical irony in the acquisition of the remnants of British Steel by an Indian company: several newspapers ran the story under the Star Wars-inspired headline: 'The Empire Strikes Back'.
For two reasons, Port Talbot failed to meet up to Tata Steel's initial profit expectations.

- Firstly, worldwide demand for steel fell after the global financial crisis (GFC) of 2007-09.
- Secondly, China began producing a surplus of steel soon after the GFC began which it dumped on world markets, including Europe. Benefiting from low labour costs and government subsidies, Chinese-made steel was far cheaper to buy than anything produced in Port Talbot.

Several European governments including Italy demanded the EU retaliate against unfair Chinese steel prices with import tariffs. But many other EU states were against any action being taken. In particular, the UK government under David Cameron was firmly opposed to any proposal of tariffs being imposed on Chinese steel, despite the clear implications of inaction for Port Talbot. Unfortunately for South Wales, the UK Government’s wider geopolitical strategy was to strengthen economic and political ties with new China which meant it wanted no part in a potential trade war. There was no desire amongst British politicians to jeopardise China’s role as an increasingly important funder of large existing and proposed infrastructure projects in the UK, such as the Hinkley Point nuclear plant in Somerset and the High Speed 2 railway.

*Figure 2 Local, national and international connections and uncertainties for Port Talbot*

Unchecked Chinese imports meant that by 2016 Port Talbot steelworks was reportedly losing £1 million a day. Finally, an announcement was made by Tata Steel that 1,000 jobs would be cut prior to the steelworks being sold or shut down altogether. The threat of closure put 4,000 jobs directly at risk plus an estimated further 11,000 in local *supply chains* and support industries. In a press statement, Tata Steel blamed its
decision on the flood of 'unfairly traded' cheap imports, 'particularly from China' and criticised the European union for not taking measures to protect the future of Port Talbot and other steelmaking places.

During most of 2017, the future of Port Talbot remained at risk until a rescue package was agreed finally by Tata Steel and the UK Government.

- Tata Steel made a new five year commitment to keep both of Port Talbot’s blast furnaces open until 2021.
- In return, the government allowed the company to close an expensive and generous pension scheme for local workers. The UK’s ageing population had turned this pension fund into a massive financial liability for Tata Steel. In the future, new workers will be given less generous pension benefits.
- Tata Steel’s decision to continue operations in Port Talbot coincided with a partial recovery in sales of British steel because of the fall in the value of the pound after the Brexit referendum: thanks to external events, Port Talbot steel had become cheaper to buy.

However, there is uncertainty about what will happen beyond 2021 particularly given the recent announcement by Tata Steel and Germany’s Thyssenkrupp of an agreement to combine their European operations in a joint venture (Figure 2). The result could be rationalisation and further job losses at Port Talbot after 2021. There are also fears about what will happen to the value of local people’s pensions (which are being bought up by unscrupulous businesses).

In conclusion, the ‘big story’ of this case study’s is the ‘tug of war’ between two emerging superpowers, India and China, with Port Talbot steelworks stuck in the middle. The future of this place remains highly uncertain because of complex political and economic forces interacting at local, national, international and global scales.
Introduction
Place is a central idea in geography and one which features highly in the A level specifications. Place is personified through identity and linked closely with culture and physical surroundings. It is where we live out our lives. In turn, landscapes are described and categorised by their physical attributes as well as the imprint of their human occupation and use. This article looks at selected, specialised landscapes in Peninsular Malaysia and what has created them: the Cameron Highlands; Georgetown, Penang; rainforest areas of the Orang Asli and oil palm monoculture (Figure 1).

One of the earliest definitions of the cultural landscape was given by Carl Sauer (1927) who stated:

"The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural area is the medium, and the cultural landscape is the result."  This means that the sum effects that human population have on an environment is a cultural landscape.

McClelland (1991) reinforced the understanding of landscape as a palimpsest, which discloses traces of past events, actions and ideas. As such, landscape is a valuable source of information about culture, past and present, and a reflection of cultural history, as well as being the setting for tomorrow’s environment.

The Cameron Highlands
Having been surveyed in 1885 by Sir William Cameron, this region became an important resort area for the British due to the cooler temperatures on this rolling plateau land. With daytime temperature maxima around 20–22°C in most months and comfortable night time temperatures of 12 – 14 °C, the contrast with the high humidity of the low-lying tropical areas led to the establishment of a hill station. As a result of the Agricultural Research Station set up in 1925, the area was found to have a ‘comparative advantage’ for the production of tea. A monoculture of several hundred acres of tea bushes was established, exporting black tea to Europe. Tea bushes are clipped throughout the year, to about waist-height by machine, which cuts the top leaves off each shoot. This type of commercial agriculture creates a distinctive patchwork of trimmed green bushes which has altered very little for 80 years. As on other plantations, workers are housed in a village close to the processing factory, creating a commercially farmed landscape overall (Figure 2).

Figure 1. Peninsular Malaysia
https://www.lonelyplanet.com/maps/asia/malaysia

Figure 2. The largest tea plantation, founded in 1929 is still run by the BOH company. Photo:
mornings give this area a surprisingly British feel. New apartment blocks and hotels are rising fast in the three main resort towns in the Cameron Highlands. This is now no longer purely an agrarian landscape but now attracts large numbers of day and longer-stay visitors.

**Georgetown, Penang**

As trade between Europe and the Far East developed from the 16th century onwards, this town and port developed as an ‘entrepot’ at the head of the Straits of Malacca. Many Straits ports owe their original success to the fact that this seaway receives two monsoon seasons. The Southwest Monsoon occurs from April to September during which sailing boats from India would deliver their cargos to Malayan ports. When the reverse Northeast Monsoon operated from October to March, traders from Indonesia would bring in their cargoes of spices to the Straits and other ships would return to India, the Middle East and Europe. From the 16th to 19th centuries, several Straits ports were transformed into cosmopolitan centres, as migrants flooded into these towns from China, south India, Sri Lanka and other parts of the Malayan peninsular. Trading companies from Portugal and Britain also brought investors and military might to protect their assets and control the waterways.

Part of Georgetown is a UNESCO World Heritage Site due to its distinctive urban landscapes, based on ethnic groupings from the Malay Archipelago, India, China and Europe. These influences have created a unique architecture, culture and townscape without parallel anywhere in Southeast Asia. The World Heritage Status serves to protect the unique elements of the urban fabric from inappropriate development. Each ethnic quarter is instantly recognisable from the mix of visual elements in the landscape.

The British colonial area is focused behind the Esplanade and around Fort Cornwallis, providing open spaces for recreation and public speaking, and military control with administrative buildings such as law courts nearby. Its distinctive character of large buildings (Figure 3) and open boulevards contrasts with the other ethnic areas.

The Chinese enclave includes the historic jetties along the waterfront at Weld Quay, each clan occupying their own jetty, with their own temples, shrines, workshops, festivals and cuisine. Chinese migrants came mainly from Fujian Province, bringing the Hokkien dialect to Penang. Shop houses (Figure 4) built around the turn of the 20th century, provide distinctive streetscapes in the Chinese quarter, with shops located on the ground floor and the proprietors living above. Thick brick walls, shutters, and terracotta floors ensured that
the interior stays cool, even during the sweltering midday temperatures.

Migrants from southern India, Sri-Lanka and Bangladesh formed a similarly distinct cultural quarter known as ‘Little India’ where exquisitely decorated Hindu temples (Figure 5) are crammed between a multitude of restaurants and workshops. Such temples and mosques are not merely buildings for worship but are a place for the less tangible aspects of culture, the meeting of people, sharing of food and all the social interaction which creates the day-to-day life of this community in these spaces.

Some highland areas of Malaysia are less touched by development, although tourism is reaching into these areas. The Orang Asli is a collective the name for the indigenous people of Peninsular Malaysia, many of whom are marginalised and live in remoter rainforest areas (Figure 6). Their lifestyle and means of production varies from coastal fishing, hunting and gathering to permanent agriculture such as hill rice cultivation. They trade in petai, durian, rattan and resins to earn cash incomes but occupy a largely pre-industrial landscape. Their cultural practices are closely linked to their intimate knowledge of the forest in which they live but rather than shaping a landscape, they interpret their own landscape through their beliefs.

Figure 5. Hindu temple in Georgetown. The author.

In contrast, much of Malaysia is now under oil palm monoculture, the land being owned by multi-nationals such as Wilmar International Ltd who benefit from government subsidies and contribute oil palm as the chief export of the country. This has created a commercially armed landscape over many acres.

Figure 6. Orang Asli village. Photo Iain Palot
The Environmental Kuznet Curve (Figure 7)

This concept can be applied to stages in landscape use and creation. It describes a largely empirical relationship between economic development and environmental degradation. Pre-industrial economies are largely agrarian-based, with low technological levels, which seek to conserve resources, so minimising negative environmental impacts. As industrialisation proceeds, so the detrimental impacts of pollution and resource depletion intensify until a turning point is reached. After this, new technologies and de-industrialisation may lead to the implementation of conservation methods, so reducing pollution levels in the environment. Malaysia’s landscapes could be seen to represent different stages of this model.

Fig. 7 The Environmental Kuznet Curve. www.economicshelp.org/blog/14337/environment/environmental-kuznets-curve/

Conclusion
Globalisation, particularly in the form of trade has been a major driver in the shaping of both rural and urban landscapes in Malaysia. However, landscapes and culture are not static. Threats from rapid tourism impact negatively on landscapes, although in the end, this may lead to increased economic stability and decisions on greater conservation. Tourism can enhance culture as well as eroding it. Malaysia is modernising and is a major contributor to IT products and services worldwide and in Asia and its high-tech corridor around Kuala Lumpur is the country’s main axis of economic growth today.

Suggested Follow-up Questions and activities
1. Place the above case studies in Malaysia on the Kuznet curve and justify your decisions. How strong is the link between environmental degradation and levels of income?
2. What are the physical and human factors leading to the contrasting cultural landscapes seen in Malaysia?
3. Should some cultural landscapes be protected ‘in aspic’ or should they be allowed to evolve?

Sources
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Cultural Festivals and political geography – a personal reflection for geographical education

Richard Kotter
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According to modern cultural and political geography, representation of issues, concepts and past processes and events do have real material dimensions and effects, connected to and also shaping people’s and organisations’ worldviews, attitudes, and behaviours. One of the connections between the arts (broadly conceived here) and human geography is via festivals.

One example comes from Honolulu, where 125 years ago Queen Lili‘uokalani and the Hawaiian kingdom were overthrown. As reported by Hawai‘i News Now, a large crowd of students, kupuna (honored elders), activists and others gathered to commemorate the day. Starting off at the Royal Mausoleum in Nuuanu, Royal Hawaiian societies presented ho‘okupu (offerings), marching towards the royal palace alongside hundreds of school children. Upon arrival, the sound of conch shells echoed through the streets and many cried out ‘oli (chants). Hawaiian flags, torches, and purple-feathered kahili (standards as symbols of the Hawaiian ali‘i chiefs and the aristocratic houses) were carried alongside a portrait of the queen. Finally, a Hawaiian flag was hoisted above the ‘Iolani palace. http://www.hawaiinewsnow.com/story/37270656/125-years-ago-the-hawaiian-flag-was-lowered-america-then-took-over

The historical political backdrop is that in January 1893 a group of American sugar planters (a revolutionary “Committee of Safety”) under Sanford Ballard Dole (Republican) overthrew Queen Liliuokalani, and establish a new provincial government with Dole as president. The coup occurred with the foreknowledge of John Stevens, the U.S. minister to Hawaii, and 300 U.S. Marines from the U.S. cruiser Boston were called to Hawaii. In February, Minister Stevens recognised Dole’s new government on his own authority and proclaimed Hawaii a U.S. protectorate. Dole submitted a treaty of annexation to the U.S. Senate, but most Democrats opposed it. President Grover Cleveland sent a new U.S. Minister to Hawaii to restore the Queen to the throne under the 1887 constitution, but Dole refused to step aside and instead proclaimed the Independent Republic of Hawaii. Cleveland was unwilling to overthrow the new government by force, and his successor President McKinley negotiated a treaty with the Republic of Hawaii in 1897. In 1898, the Spanish-American War broke out, and the strategic use of the naval base at Pearl Harbor during that war convinced the US Congress to approve formal annexation. In 1900 Hawaii was organised into a formal U.S. territory (through an Act to Provide a Government for the Territory of Hawaii, also known as the Hawaiian Organic Act”) and in 1959 entered the United States as the 50th state. http://www.history.com/this-day-in-history/americans-overthrow-hawaiian-monarchy

Of course, this history and geography is controversial and different interpretations have been offered, both in Hawaii and in mainland USA. Kamehameha Schools (KS) in Hawaii have a Strategic Plan 2020 to guide Kamehameha Schools from 2015 to 2020. A story (mo‘olelo) on their website entitled “The truth behind the overthrow of the Hawaiian Kingdom” from January 2017 is stated to address Goal 3 of SP2020 calling for KS to cultivate a Native Hawaiian identity within its learners. It also supports Action 5 of Kamehameha’s Ten Actions for the fiscal year 2017, asking KS to integrate cultural principles system-wide, including Ho‘ōla Lāhui (Revitalizing the Hawaiian People), “a KS cultural principle that provides opportunities for employees, haumāna (students) and ‘ohana (family) to learn about and cultivate Hawaiian identity, history and culture,
The UK and elsewhere has many re-enactment festivals – often of military confrontation kinds - which can generate cultural tourism and local economic benefits. Other past wars and military and societal conflicts or campaigns are reflected in parades. The Orange Order ones have, for instance, in recent years made it onto the streets of Newcastle upon Tyne but also have a tradition in Canada (e.g. Toronto). When the Northern Ireland parades are routed and are allowed to proceed, they create an annual flashpoint in the Province each year.

In the United States, Geography Awareness Week is marked every year on the third week in November and in 2017, the theme was the geography of the Civil Rights Movement in America. In October 2017 I was involved, as were many university, FE and school students and all kinds of members of the public, in an arts-based city-wide programme across Newcastle upon Tyne called Freedom City 2017. This aimed to mark the 50th anniversary of Dr Martin Luther King Jr receiving an honorary degree from Newcastle University. On accepting this award, Dr King made his final public speech outside of the US before his assassination in April 1968. In a moving impromptu yet lucidly argued address, he called for supporters to join in the ongoing struggle against war, poverty and racism.

As well as lectures, films, exhibitions and concerts in Newcastle, the Freedom City 2017 festival included a mass participation event inspired by Dr Martin Luther King Jr’s legacy and epic civil rights struggles, past and present. This was widely covered in the press, and drew many visitors to Newcastle/Gateshead.

The team around international theatre director Tim Supple and the Northern Roots cultural production company chose to not re-enact but rather to dramatically perform an artistic representation of four global stories around civil rights: Selma, Alabama in 1965; Amritsar, India 1919; Sharpeville, South Africa 1960; and Peterlee / Manchester, England 1819, woven together with the Jarrow March in 1939 (from Tynside to London) and other UK struggles such as the Suffragette movement). A host of professional international singers and actors and, crucially, a cast cast of hundreds of amateur performers took part in street play scenes, movements and chants.

Cast in the Sharpeville story, inter alia as white Apartheid South African Police Colonel Pienaar, I know the shaping of this story better than of the others, with changing scripts and movements co-created between the professionals and the amateurs as well the selection of the most powerful yet doable chants. My neighbour played British General Dyer of Amritsar, likewise ordering a massacre on civilians, before all of us came together walking towards and onto the Tyne Bridge, to listen – amongst other performances - to Dr King’s re-performed speech. Our director Tim Supple extolled us to find a personal connection to the civil rights struggles, with many discussions amongst performers and spectators during and after the festival.

Freedom City 2017 aimed to bring Dr King’s legacy to life for a new generation, equipping us with knowledge and skills, as well as to empower us to continue towards tackling the great problems of war, poverty and racism. One such resource which can be used as an educational resource has been created by the Martin Luther King Peace Committee, the Martin Luther King in the UK. A Resource Pack for Teachers in...
Key Stages 2,3 & 4, a pack including lesson plans, hand-outs, worksheets, music recordings and presentation slides for lessons across a broad spectrum of subjects, including Geography, as well as material for school assemblies. [http://research.ncl.ac.uk/martinlutherking/activities/mlkinuk/](http://research.ncl.ac.uk/martinlutherking/activities/mlkinuk/)

For me, the legacy is that some of my fellow Sharpeville amateur performers (professionals in outreach and education) now serve with me on the local committee of Journey to Justice [http://journeytojustice.org.uk/](http://journeytojustice.org.uk/), a new national human rights charity whose national touring exhibition focuses on the US civil rights movement and its music. It tells the extraordinary story of some of the less well-known women, men and children involved but also highlighting some of the many struggles for civil rights in the UK. The exhibition and related activities examine key events, themes and tactics, demonstrating what leads people to become and stay active in campaigns. It illustrates how the US civil rights movement has affected people in the UK and worldwide and helped inspire subsequent women's, peace and gay liberation movements. The exhibition links with local communities who research and produce local elements to this. Using creative arts and intergenerational activities, *Journey to Justice* aims to show how change for social justice can happen and be led by ‘people like us’ around the UK. The localities and communities who are getting involved with *Journey to Justice* are mobilising for social justice now and the future in the UK, and do so through the triangle of civil rights history, creative arts and educational and social empowerment. [http://journeytojustice.org.uk/projects/journey-to-justice-all-over-the-land/](http://journeytojustice.org.uk/projects/journey-to-justice-all-over-the-land/)

As I write, we are busy co-creating and hosting Women’s 100 events – alongside many other organisations - another UK and global civil rights struggle.
Using GIS in A-level Geography to support geographical enquiry and develop students’ geographical knowledge
Grace Healy, Katie Hall, LCpl Jack Whelan, Daran Scarlett, and Lucy Dowd
Comberton College

In the autumn term of 2017, at Comberton Village College, we committed to integrating a programme of GIS within students’ A-level examination course. From the outset, we were keen that GIS was not seen just as a skill by students, but that it became an integral part of supporting geographical enquiry and developing their geographical knowledge (Walshe, 2018). Alongside this, with the support of Dr Nicola Walshe, we are undertaking longitudinal research into how this programme develops students’ perceptions of the value and nature of GIS, and supports students’ geographical thinking. Based on our preliminary findings, it seems that from the outset, students do not fully recognise the significance of GIS to them or to their A-level studies in geography (Walshe & Healy, 2017). We developed and adapted our GIS programme in response to these initial findings. This article will reflect on some aspects of this emerging programme, and provide some reflections from those involved.

A perspective from the Esri Education Team - Dr Katie Hall

In 2017 Esri UK made their ArcGIS Online software freely available to all UK schools. By doing this the company hopes to encourage a new generation of GIS enabled citizens, and to help schools meet their National Curriculum and exam requirements to teach GIS. Web GIS is unfamiliar software for many people, and teachers often report unhappy experiences using desktop GIS software at degree level. This is a clear barrier to effective classroom use. To help resolve these problems, Esri UK has a dedicated educational team – including a former classroom teacher — and 300 professional GIS users registered as volunteer GeoMentors. These industry experts give their time to schools to support their use of GIS. They help teachers get familiar with the ArcGIS Online platform, create new resources in collaboration with staff, and inspire students to pursue their own careers in GIS by talking about their experiences.

In January 2018 Dr Katie Hall, a member of the education team, worked with Comberton Village College to support their use of GIS in A Level fieldwork. The first lesson recapped what Geographical Information Systems and geospatial data are. Katie felt this was important, as from her own teaching experience she knew there are a lot of misconceptions surrounding GIS technology and the data it uses. Her key message for students was to view GIS as a tool that lets them ask questions about different places and explore complex data more easily. It is not a computer technology that does work for them at the click of a button! Some real-life field uses of GIS were examined together, before addressing how students might use GIS to support their own enquiries at different stages of the research process.

Figure 1: What is GIS and how can students use it?
Students had already formulated their geographic questions or hypotheses for fieldwork testing. The rest of the first session focused on how to acquire geographic resources - in other words, primary and secondary data.

Primary data can be gathered using a field app called Survey123 (Figure 2). This is a digital version of a traditional worksheet and clipboard. Students and staff write their own surveys using an intuitive web interface, which is then downloaded on to their ‘phones and tablets for use in the field. Comberton students created and downloaded their own Survey123 questionnaires with ease.

Students also looked at how to find secondary data, and why this might be useful before going out in the field for risk assessment and sampling strategy design. ArcGIS Online contains large amounts of secondary data made available by a range of government agencies, charities and businesses – professional users of the same platform. Datasets include population demographic and economic measures, topographic data, earthquake and hurricane data, land use records, the Index of Multiple Deprivation (Figure 3), ONS census data, crime statistics and more. These can be found by searching within ArcGIS Online or browsing the Living Atlas: https://livingatlas.arcgis.com/en/
Students took Survey123 out into the field and collected their own data. This was then examined together in the classroom. Survey123 presents collected data instantly. This allowed high quality discussion to take place about the results and their representativeness, in the time that would normally be spent typing up answers and drawing charts on the computer (Figure 4). This discussion allowed students to develop other, more nuanced, questions to ask of their data - did distance travelled affect perception of place? Did aspects of respondent’s identity inform responses to questions about perceived diversity? Does the IMD ranking of where respondents came from impact their perception of space? At first students were unsure about whether their data could even answer such questions.

Analysis tools within the GIS were live demonstrated to show how they could test such queries, and students then attempted to run their own analyses doing the same.

This final aspect of the work was challenging for students. It requires them to think independently about important questions for their data – and some students feel anxious and uncertain asking questions rather than answering them. It also needs teachers and GeoMentors to carefully explain what the GIS software is doing with the data to answer them, in understandable language. In future sessions this is an area for further development – and something the Esri UK education team will provide teacher resources for through their continually evolving resource centre: https://schools.esriuk.com/teaching-resources/#

A student’s perspective - Lucy Dowd
ArcGIS online provided an easy way of exploring and understanding data, compared to other ways we have learnt to present primary and secondary data in class. I have learnt that I can continue to present data in this way and do it digitally, by adding layers of different information, so I can now compare and contrast different aspects of my data. We collected our data using Survey123. This was easy and quick to learn how to do. Compared to paper questionnaires, it was easier to create our questionnaires in Survey123, as it allowed us to format questions in a variety of ways. It was really helpful that it could track our location, which meant our data to be mapped directly on ArcGIS online.

As a student, having all of the data presented in graphs and charts allowed us to easily use explore our initial results. We could then manipulate the data in ArcGIS Online. I was therefore able to use these graphs directly and used the data from this to create different ways of presenting and analysing my data. Dr Katie Hall took me this step-by-step through the process of creating a choropleth map. Having access to someone who understood the platform and what I was trying to achieve was useful and made my write-up a lot more detailed with the knowledge that I gained from this. The resources provided were useful and allowed us to make flow lines and use distance tracking in our work. Using ArcGIS online has helped with my geographical skills and data presentation methods. I also think that more broadly it allowed me to realise that many career paths involve GIS and can be connected to geography.
A Geomentor’s perspective – LCpl Jack Whelan

The Army’s 42 Engineer Regiment (Geographic), based in Cambridgeshire approached the sixth form Geography department of nearby Comberton Village College. As part of our community engagement activity, the aim was to identify where the Regiment’s skills and experience might assist in their teaching of the new geography curriculum. Comberton Village College was already highly committed to the subject, as an early signatory to a nationwide ‘Geomentor’ programme, backed by the Royal Geographic Society and Geographic Information Systems (GIS) specialists Esri UK, which gave them access to the same GIS tools and systems as the Regiment.

A very good relationship was quickly formed and in early December 2017 members of the Regiment were invited to introduce themselves to the sixth form students. This enabled the class to gain an understanding of the Regiment’s specialist capabilities, discuss the real-world application of GIS and the importance of geographic understanding in informing decision making.

Early in 2018, members of the Regiment returned to support the department in the delivery of its next topic in the curriculum, Natural Disasters, with a focus on Tropical Storms. Whilst the curriculum provides information on how and why these events occur, understanding of the effects on the population, infrastructure and the environment is largely based on available media coverage. Here, the Regiment could share its first-hand knowledge and experience, having provided on-the-ground assistance following one of the largest storms in recent history, Hurricane Irma.

Soldiers with first-hand experience delivered a GIS-based presentation on Operation RUMAN, the Regiment’s most recent and successful action in response to the humanitarian crisis that unfolded in the aftermath of Hurricane Irma. This presentation and related discussion period provided students with a detailed case study from which they learnt how a wide range of geographic information, imagery and population data can be brought together and analysed to create products that can be shared with responders, informing relief efforts. This stimulated questions from the group around post-crisis support and how lessons learnt can be applied in the future.

Future plans for engagement include participation in a field data collection activity, where the Regiment’s experience can be drawn upon to provide guidance on displaying, analysing and interrogating collected data. The Regiment is also keen to engage with other schools and colleges locally - as the GeoMentor programme continues to grow, other schools are acquiring the tools and knowledge to make more use of GIS and have expressed interest.

This has been a positive experience which has enabled the Regiment to build stronger ties with the local community as well as the broader GIS community. At the same time, engagement at this level is hugely beneficial to the Regiment in developing the presentational and instructional skills of our Geographic Technicians - we look forward to further interaction throughout the year!

References


Using Story Map for NEA and EPQ

Rachel Adams FRGS CGeog

What is Story Map?
Story Map is an online presentation tool (https://storymaps.arcgis.com) with the facility to incorporate interactive GIS maps, as well as images, videos and web links. It is part of ESRI’s suite of online GIS tools that can be used to show all kinds of geographical information. ESRI has made ArcGIS Online free to schools, and the Ordnance Survey have made OS maps, at all scales, freely available to schools for use within ArcGIS online.

Story Map comes in a variety of formats to suit the required use, but perhaps the best format for school use is the Story Map Series. This can be used to present a series of maps and images, and has a side bar that has text to explain the map being shown. Scrolling through the presentation can be done using tabs, a side bar or numbered bullets. (Examples of these types can be seen at the Story Map Series Gallery: https://storymaps.arcgis.com/en/app-list/map-series/gallery-series. There are a huge number of different Story Maps available to view, many of which are of great interest to geographers and could be used in lessons (see Figure 1).

Figure 1. Tracking the 2017 Hurricane Season (produced by NOAA)

https://portal.nvl.noaa.gov/arcgis/apps/MapSeries/index.html?appid=6f3c57dd42504564be399bfbfad078ae

Why use Story Map?
1. It is an incredibly effective way of communicating geographical information. A wide selection of data can be presented quickly and easily for analysis.
2. It focuses students on the evidence, presented through maps, graphs, images and other formats, and challenges them to analyse this in a concise and effective way rather than writing too much.
3. It brings student research and presentations into the 21st century, by enabling an interactive response. The user can examine individual sites in detail by clicking on place-marks which provide information and images.
4. Its interactive nature makes Story Map a great motivator for students.
How can students learn to use Story Map?
ESRI have made producing a Story Map very straight-forward and it doesn’t take long for students (and even their teachers!) to pick up the basics. Guidance is given online and there are tutorials for each type of map (https://storymaps.arcgis.com/en/app-list/map-series/tutorial/).

For each tab or page there is the option to choose the graphics to be presented, whether interactive map, image, video or web page, and the presentation of these can be customised to suit. Explanatory text and other content, in the form of more images, videos and links, can be added to the side-bar. Once saved, the Story Map is automatically hosted on ArcGIS as a web page in the user’s (or school’s area). The link can be shared with others.

How can students make the most of Story Map?
While it is quite easy to make a basic Story Map, effective presentation and analysis of geographical data through this medium requires a sound understanding of ArcGIS Online. This takes time, and, in an ideal world, students will have acquired GIS skills through their geography lessons over a number of years, gradually building their confidence and expertise. However, it is not difficult to master some basics which will lift the quality of students’ assessed work for both NEA and EPQ:

- Place-marks can be used to show the location of sites, with images and key information.
- Location data can be added to spread sheets of field work data and the data imported as a CSV file, enabling it to be shown on an ArcGIS map.
- Different sets of data can be analysed within ArcGIS by clicking on ‘Change Style’: Heat map is a good way of highlighting high densities, as shown on Figure 2. Students can either use their own data or import secondary data. The crime map uses data from the Police website
- Census data shows Indices of Multiple Deprivation as choropleth maps and these are great for student research, analysis and incorporation into Story Maps as shown in Figure 3.

Can Story Map work as a tool to deliver NEA or EPQ?
Yes, most definitely. A couple of years ago, prior to the new ALs, one of my students used Story Map to present her research findings for EPQ. She investigated the potential link between climate change and terrorism in Bangladesh and was able to show some of her information as interactive maps (see Figure 4). The outcome was highly successful: not only was it hosted on the ESRI schools’ gallery, but it was a key topic of conversation in her Cambridge interview and assisted her in securing a place. There is no doubt that this approach could be replicated for NEA.
Post 16/HE Fieldwork Planning Competition

We wish to encourage A-level Geographers in the individual investigations which they all have to undertake. Planning the NEA is a vital element for success.

Our competition is based around the “what, where and how” aspects of the investigation. Students are asked to outline their thinking and explain how they are going to go about their research. They need to be precise about the aims and objectives of the investigation, what primary and secondary data they intended to collect, and indicate how they would present and analyse it.

We are looking for an investigation that reflects good practice in research skills. It needs to be manageable in scale, achievable within the time frame, and presentable within 3000-4000 word limit set by most exam boards. We look for a “stand out” plan for an imaginative or original piece of research, or an interesting way of collecting the data, and a clear sense of the ‘road map’ a student intends to follow.

The entry form requires students to outline each stage of their investigation planning, all things that they would normally be doing as part of their work. We do not wish to increase the burden on students but to encourage good practice.

The entry form and further details can be found on the Post16/HE Phase Committee webpage. The deadline for 2019 is October 31st 2018.

Congratulations go to the 2018 winner: Jessica Harbord from Queen Ethelburga’s College in York with her plans to study the effectiveness of sea defences on the Yorkshire coast.
What’s On…..

Join our sessions at Conference!

Friday 6 April 14.55 – 15.45 Reflections on the first A level cycle – how’s it gone?  
Dan Cowling, Deputy Headteacher, Vyners School, London

Saturday 9 April 11.45 – 12.35 Challenging the contemporary suburb: neither urban nor rural  
Dr Alan Marvell, Senior Lecturer, University of Gloucestershire

Wimbledon Geography Teachers’ conference  
Wimbledon High School for Girls  
3 – 7pm Wednesday 20 June 2018

Beth Davies: UK Glaciation  
Alastair Owens: Changing place: concept and reality  
David Johnson: Oceans: A sea of Interest  
Urban ecosystems under stress: a speaker from the LWT

Plus ideas for NEAs

£25 including refreshments

For further information, and registration, please see the Post16/HE webpage, or contact Iain Palôt iesgrionettes@yahoo.co.uk