

NEA Independent Investigations: KCL teacher workshops

The recent introduction of the NEA Independent Investigations for A-Level Geography has provided an exciting space for students to engage with research-based learning which sets them up well for either geography at university level and developing independent research skills for the workplace. That being said, it also introduces challenges for teachers to provide support for students to undertake independent research projects which can occur across the range of seemingly endless geographical sub-disciplines and topics.

University staff are in a position to offer support to A-Level teachers in this regard, as they are both experienced at conducting their own research as well as acting as supervisors for similar projects across their university programmes, from field course research projects to dissertations.

The Department of Geography at King's College London has in the past held workshops for teachers to share their experiences of supporting students through independent research projects. These were highly engaging and rewarding workshops for both the academics and the teachers who attended. The last one was held online, so had the added benefit of being recorded. The various sessions are outlined below, and are provided here to hopefully offer some support and materials for teachings for the Independent Investigations.

#### From Ideas to Practice

One of the biggest challenges of developing projects for students are the initial stages of coming up with a practical and interesting project. Dr Kevin Lougheed offers experience and suggestions of the process of coming up with research questions, taking this through the process of methods to investigate these questions, and the different approaches to putting a potential question into practice.

The session can be found here

#### **Approaching Quantitative Data**

As Geographers, one of the greatest sources and analytical methods available to conduct research projects is that of open source data and GIS. In this session, Dr Jon Reades discusses some approaches to accessing, exploring and analysing open source data through a geographical lens. This is done by discussing approaches and then providing examples and cases of independent research conducted through open source spatial data.

This session can be found here.

#### **Talking to People**

Traditional methods in geography are through collecting data directly from people, from surveys to interviews and focus groups. Students often directly link research projects with these forms of methods. Students can launch into projects such as these without fully considering some of the challenges involved, which can lead to difficulties in the analysis stage. Dr Helen Adams discusses here experience of methods involving talking to people, offering advice and considerations about the process involved in this form of research.

This session can be found here

### **Locating the Past Online**

Archives are an invaluable source of data for geographers. Research the past has always been a central focus of historical geographers, and any number of projects across the discipline can be explored through a historical lens. Archives are increasingly digitising their collections, allowing for easily accessible historical data for anyone. Prof. David Green discusses the use of online archival data to conduct research offering various examples and useful sources in which to conduct independent research.

This session can be found here

## **Researching Climate Change through Archives**

In advancing the discussions of archival research, Dr George Adamson provides an in-depth case study of the important topic of climate change can be studies through a historical lens. There is a multitude of data sources on climate change in the past, from ships logs to newspaper articles and government reports. The case study of climate change here demonstrates that the topic can be explored through both quantitative means but also through qualitative means relating to our shifting understanding of 'weather' throughout time.

This session can be found here

#### FreeStation: Building and developing low cost sensors and monitors

Environmental sensors and monitors are a fundamental data collection tool for physical geographers, however the cost of commercial equipment is prohibitive for teachers and students alike. Prof. Mark Mulligan has developed a process for building low cost sensors through his FreeStation project, and here he shares his experience of building and using DIY hardware for environmental monitors for his research.

This session can be found here

# NEA Independent Investigations in Geography Webinar: Q&A Session

The workshop ended with a wider questions and answer session with a number of academic staff at King's College London in which attendees were given a space to ask questions around supporting students through their Independent Investigations. Questions revolved around general challenges to projects, specific experiences of university staff in their supervisor roles, engaging students who lack motivation for research, changes of topics, among others.

This session can be found here