

ADELAIDE CASE STUDY

DRIVING DEPARTMENTAL
CHANGE AND TEACHING
DIGITAL HUMANITIES
COURSES WITH

**GALE DIGITAL SCHOLAR LAB** 





### INTRODUCTION TO UNIVERSITY OF ADELAIDE

A member of the Group of Eight association of Australia's leading research-intensive universities, the University of Adelaide is a public university founded in 1874. According to the Times Higher Education World University Rankings 2020, the University of Adelaide is the 7th highest ranked University in Australia, and 120th in the world.



**DEANNE HOLMES**Manager, Academic Liaison | University Library



**HELEN ATTAR**Liaison Librarian | University Library



DR AARON HUMPHREY

Lecturer in Media and Digital Humanities

School of Humanities | Faculty of Arts



PROFESSOR JENNIFER CLARK

Head of School – Humanities

School of Humanities | Faculty of Arts

#### TRANSFORMATIONAL AMBITIONS

Whether on campus or in their online presence, a clear desire to grow, evolve and improve shines through from the University of Adelaide. This ambition is reflected in results, with Adelaide seeing consistent impressive growth in their global university ranking over the past six years.

As Professor Jennifer Clark, Head of the Department of Humanities describes, "[there is] definitely a plan for growth, in terms of student numbers, but also in terms of research capabilities". Growth in student numbers is only one part of the equation, as she continues, "we are definitely looking to attract students to new programmes and to new research areas – so we are definitely on an expansion trajectory".

For the Department of Humanities, this means "a number of new programmes, it means different approaches to things, different styles of teaching, moving more into online teaching, moving into areas that we haven't been in before, or into areas that are extensions of those areas that we've been in before".

This transformation is extremely well supported by the library, and in 2018 they were successful with a funding bid to purchase a significant collection of *Gale Primary Sources*, along with *Gale Digital Scholar Lab*, Gale's text and data mining platform. It was envisaged that these purchases would be central to a departmental shift from more traditional research and teaching methods towards incorporating more digital methodologies, and in enabling the university's ambition to branch into new areas. As Helen Attar, liaison librarian for the Faculty of Arts explains, "eventually the university will be in a position to offer many more online courses globally, and these databases and the *Gale Digital Scholar Lab* will have a significant place in that future".

Professor Clark is enthused about the possibilities for new scholarship by embracing digital methodologies, explaining, "we are constantly looking at different ways of teaching and different ways of exploring the humanities".

This transformation means structural change as well, and in 2019 the department of humanities gave the opportunity for a staff member to switch their discipline to include Digital Humanities (DH). This opportunity was taken up by Dr Aaron Humphrey, lecturer in Media and Digital Humanities. As Dr Humphrey explains, his new role was driven by "a strategic need to move forward with digital humanities more quickly". He continues, "Adelaide is one of the few places in Australia where you can take a major or a minor in digital humanities and we are looking at increasing that, in addition to introducing the students to the tools and techniques used in digital humanities".

## USING GALE DIGITAL SCHOLAR LAB TO DRIVE DEPARTMENTAL CHANGE

Adelaide are seeing the benefits of having Gale archives and the Lab in teaching. Dr Humphrey explains, "I think absolutely arts students, literature students or students of history are reaping benefit from digital humanities because it's about taking these newer tools and applying them to this huge archive of older material that we have and that's increasingly being made available - which makes it very easy for students to do research that's never been done before. And it's extremely exciting for students of history and literature and for me, communication".

Professor Clark sees this benefit as crucial to the aims of the ambitions of the department, and the university: "if you go to the Gale archives, you've got access there to a whole raft of materials that you can pull apart in a variety of ways and the question is then about what the student wants to ask, what new approach they want to pursue, what peculiarity they want to look at. So, they need materials to approach in new ways, they need to ask new questions, and the most interesting history is that which asks questions which haven't been asked before or explores new material that hasn't been looked at before".

Having Gale Digital Scholar Lab available is central to the aims of providing new avenues for discovery. Dr Humphrey continues, "the tools that we have to explore, like the Gale Lab, are immense, so there is a real opportunity to delve into things there that haven't really been done before". In the classroom, "that's the benefit of the Digital Scholar Lab platform – to get students in there and to really very, very quickly build a dataset, talk about it, look at the results, and then be able to refine that".

The University of Adelaide has enthusiastically adopted the *Gale Digital Scholar Lab* and are in the top 5 global users over the past year. Helen Attar explains one possible reason for the high use, "it's not just the school of humanities actually, because one of our prominent users of the Lab and the Gale products is the social sciences department, specifically in the area of Asian studies". One of the uses of the Lab here for students is in identifying and analysing social attitudes towards Asian communities, through large-scale mining of historical newspapers. This focus on using *Gale Primary Sources* for Asian studies is evident in the heavy use of Gale's *China and the Modern World* series, which is in the top 5 most accessed archives at the university.

It's not only the multi-disciplinary uptake of the Lab that has driven the focus on digital humanities and digital research concepts, but also its applicability across levels in the university. Helen Attar explains that initially, the library "anticipated that this would be a researcher tool, but in fact it's been in undergraduate teaching that they've really been embracing it".

The Gale Digital Scholar Lab is designed to benefit all levels of digital scholarship; from experienced researchers creating their own algorithms and tools to entry-level practitioners with no previous coding experience. Dr Humphrey identifies this opening up of access as critical in the adoption of the digital methods in his classes. Even in the Digital Humanities courses, students often "find it challenging to be asked to so something like write some html or something like that".

This ability for anyone, regardless of technical skill, to quickly curate, clean and analyse a content set is mentioned often as an important skill for students at Adelaide and linked to helping to achieve its strategic aims. Professor Clark identifies a key benefit of digital humanities as providing arts and humanities students with desirable skills in the job marketplace. She describes the advantage for the department in attracting students, "that we can say you can still do the arts and humanities, but you can also get these [technical] skills and have that knowledge". Helen Attar concurs; "the biggest growth in jobs is in data science, so anybody that has skills in data management, data manipulation, data visualisation, data wrangling, is going to be well sought after".

"We want to be able to provide, through digital humanities, the opportunities to bridge those two worlds of the sciences and the arts and humanities if students want to", says Professor Clark. "And for those who are a bit maths phobic, to see that digital humanities can actually help them to analyse their arts and humanities materials in new ways and with great success. So, it's a way of bleeding across the disciplines and it's a way of ensuring that students can have a raft of skills".

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# GALE DIGITAL SCHOLAR LAB IN THE CLASSROOM

Practically, incorporating the teaching of these new skills into a traditional humanities course can be challenging. "We have ten weeks of teaching time, [and] I do not have time to teach students command line coding", says Dr Humphrey. "To get them to do topic modelling in Python, that's going to take more time than I have in a class to be able to do". For him, the Lab is the solution; "what I really like about the *Gale Digital Scholar Lab* is that you can get the results so quickly, and you can run multiple kinds of tests, it's just there in the browser". He continues, "It gives you a lot of flexibility in what you can see and then for people who want to go further, it's a stepping stone. But you have to be able to see what you can do first, to have an understanding of what is possible".

At present, Adelaide offers a Major and a Minor course in digital humanities, featuring a set of pre-existing courses in which there is a digital humanities component. Elective classes available include Introduction to Programming, Philosophy of Science and News in the Digital Age. A new aspect in the DH teaching is the introduction of a capstone project. "It's called 'Digital Worlds: Past, Present and Future'", explains Dr Humphrey. "[It] allows students to really delve into a digital humanities project, working with other people to pick a topic that they're interested in, and exploring and presenting it using digital tools". He continues "that's something where we will use the *Gale Digital Scholar Lab* from week one".

Currently, the Lab is being used, "in our Media Studies classes such as 'Researching Media', where students can guickly pull old newspaper articles on topics they are interested in into a Content Set and run the suite of analytical tools to see how sentiment analysis, topic modelling, and other kinds of machine-reading can be used to make assumptions about large groups of qualitative data. It's really helpful to be able to show media students how these kinds of tools work, since they are aware that this kind of thing happens on the social media and websites they visit online, but they don't usually have direct experience with this kind of software. I like how the Digital Scholar Lab makes this kind of analysis very easy to do, allowing us to get pretty robust and compelling results quickly enough to be able to dissect them in a tutorial session".

Helen Attar gives another example from Asian studies. "The group were particularly interested in doing the timeline searching, so they were looking at things like the tea trade and Christianity through Asia which they are able to interrogate in the Lab. What was most interesting for them was to be able to look at that by pulling out key terms and seeing how terms had shifted over time".

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# RESEARCH APPLICATIONS AND POSSIBILITIES FOR THE FUTURE

Dr Humphrey describes the benefits of digital humanities to the ongoing aims of the Department of Humanities: "there is the opportunity to be able to use DH tools to explore things that haven't been explored yet, to ask questions... from a research perspective that is really exciting".

There is excitement about the possibilities of *Gale Digital Scholar Lab* for driving research discoveries in non-humanities disciplines as well. As Deanne Holmes, the manager of the academic liaison team in the library explains, requests come in to analyse databases from across the student body: "in psychology often I get students looking at newspaper analysis around certain topics, like bullying through the media".

To foster collaboration between disciplines and spread the benefits of digital humanities, the library is creating their own Digital Humanities Lab, a physical space in the library with equipment to foster discovery, collaboration and learning. "It's a really exciting development" says Dr Humphrey. "We are turning [this space] into a digital humanities lab that will have document scanners for digitisation projects, 3D scanners, 3D printers, VR headsets, interactive displays so we can put exhibitions on.

It will also be a meeting place where people will be able to have seminars on digital skills, allow students to present their work, and collaborate with colleagues from other departments". He continues, "in this space, people will be able to access the *Gale Digital Scholar Lab*, and then throw their visualisations up on a big projector or have people being able to say I want to put archives into a virtual reality, those kinds of things".

Professor Clark identifies how Adelaide plan to use digital humanities, the availability of archives and *Gale Digital Scholar Lab* to transform the Department of Humanities: "I would expect in the future that most students [across the university] would have opportunities to do digital humanities. I think it's going to be a considerable change for us". Dr Humphrey agrees. "It's not easy but I do think some of the most vital work in digital technologies is figuring out where disciplines cross over and how we can create students that are technically literate and also who have an understanding of the human heart... the possibilities are almost unimaginably full of potential".

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