# What skills are needed? How are they learned? Students research employability and digital skills

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In 2021/22, LSE Digital Skills Lab and LSE Careers recruited students to research three pressing questions: What digital skills and competencies are highly valued by employers? Where do LSE graduates learn their digital skills, and what is the role of LSE in providing training?

This poster draws on staff discussion, and the report by the student researchers: https://bit.ly/3rPS08C
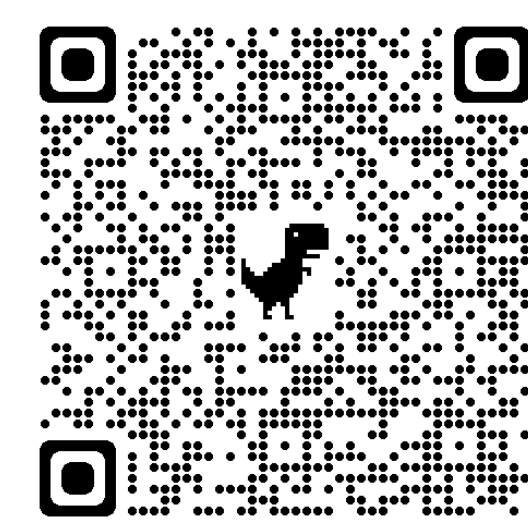
Partnership aims and outcomes

The project was coordinated by LSE Change Makers, a 'students as change agents' programme which facilitates student research projects throughout the institution on an annual cycle. Around half the projects are proposed by staff; students apply by submitting a proposal for how they would carry out the project.

Staff from the LSE Digital Skills Lab and LSE Careers had specific reasons for taking a partnership approach to their research.

Incorporating student priorities and perspectives

Staff had a clear idea about what they hoped to achieve, but wanted to incorporate current student perspectives.
The student researchers chose the projects' methodology, and refined it with input from staff; developed survey questions, with feedback from staff; and chose how to collate and presenting findings (see right). The result was not wholly different from what the staff had envisioned, but was more authentic, building on the specific concerns of the students.

Reaching employers

The Digital Skills Lab and Careers had previously collaborated to update their understanding of employer needs, including contacting employers. However, responses had been thin. Staff hoped a student-led project would elicit more responses and potentially a different quality of response.
Responses to the project were significantly stronger than from previous efforts to reach employers, and provided detailed information from a number of sectors (see right)

Alumni informing change

Staff hoped to create a beneficial 'feedback loop': learning from the experience of alumni to develop provision for incoming students. The inclusion of current students was intended to strengthen this loop.
Results for this project were highly positive. The project has also led to a more continuous process: the employer engagement team now send out regular short surveys, using questions from the project, to take the temperature of employers' skills needs. Responses to these shorter surveys have been high, and findings have continued to be useful and to inform provision.

> "We knew the sort of business problems we were trying to address. But we have our own biases; the students came up with interesting questions, different approaches."

Partnership recommendations

Intrinsic interest

Change Makers is a competitive project; the student researchers needed to submit an application with their own ideas for carrying out the project. Staff involved in the project felt that this intrinsic interest fueled the project.

Clear aims for project outcomes

The project nevertheless had a clear end in mind, and a plan for how staff would act on the findings. Staff recommend knowing how you intend to use the output of the project and communicating that to students in advance to give them guidance.

> "It really does have to be a respectful partnership. Respect that students have an interest, and allow them to follow that interest, within reason!"

Project methodology

Student researchers chose to answer the research questions through a mixed-methods survey of recent alumni. These alumni were well placed to understand the day-to-day use of digital skills in their roles, more precisely than the ambiguous language of job advertisements. They could also report where, as students, they had developed relevant skills.

Project findings

Using data from 178 respondents, student researchers analysed seven sectors for their digital skills requirements: Researchers, NGO and Public Affairs; Policy and Government; Information Technology; Consulting; Finance; Retail and Manufacturing. For each of these, the researchers created:
- a **'top skills cluster'** of the most necessary skills
- a detailed breakdown of how specific programmes were used in those roles. For instance, MS Excel is used for project management in NGO and public affairs, for model building in Consulting, and for data management in Retail and Manufacturing.
- Specific features and functions used within each programme
These are all available in the project report (available in the Change Makers research Gallery archive)

Project recommendations

Researchers identified different phases of their learning process, and presented their recommendations within this framework.

Identify ➡ **Locate** ➡ **Acquire**

Identify

At the "Identify" stage, students face informational frictions in identifying valuable, career-relevant skills.
- Raise awareness on the importance of digital skills
- Make digital skills courses mandatory

Locate

Once students pinpoint the skills they aspire to learn, they seek digital skills courses/workshops that fulfill their learning needs.
- Improve the visibility and accessibility of digital skills courses/workshops

Acquire

Lastly, at 'Acquire', it is crucial that the digital skills opportunities provided by LSE are optimally designed to cater to students' varied needs and preferences while ensuring that learning outcomes have lasting benefits into one's careers.
- Focus on practical application of digital skills
- Offer workshops that integrate multiple complementary software
- Diversity of courses catering to varied needs
- Relieve term-time pressures by providing summer classes or extending resources to alumni

Full recommendations are available in the project report: https://bit.ly/3rPS08C

Acknowledgements