

Employability Skills in Economics Degrees

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Abstract

When economics students graduate from university in the UK they embark on a wide range of different careers. They are well-versed in the models, empirical techniques, and academic arguments familiar to academic economists, and understand the value of economics for evidence-based analysis of real-world decision-making. However, employers find that they are less well equipped with skills needed for the workplace, including for working as professional economists. In this paper we examine, using survey evidence from 2019, what the gap is between the skills that academics try to develop in economics degrees and the skills that employers are looking for from graduates. With a deeper understanding of the gap, we discuss how it may persist, despite an increasing focus on employability skills within degrees, because of different interpretations of what the skills mean. We also explore whether economics departments are taking the most effective approach to implementing their employability strategies, recognising that what is written on paper and how it is delivered can be different. We consider what the challenges are to making progress in this area and provide ideas that economics departments interested in doing more could adapt for their own needs.

Keywords

Skills, employability, active learning, work-related learning, work-based learning

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Introduction

When a student chooses to specialise in economics at university, they are no doubt curious about how to analyse real world problems, how to discuss and debate topical policy challenges and how to communicate evidence-based answers to different audiences. Indeed, this is what we all aim for as researchers in a discipline whose value comes from the power to combine theory, evidence, and storytelling. The skills that we require as economic researchers overlap greatly with skills that employers look for in a wide range of sectors, including but not exclusive to economist roles in non-academic settings.

To prepare the future generation of economics researchers, and to help our students prepare to do well in other careers that they choose, there is an onus on us as educators to ensure that they graduate with both the knowledge and skills needed. This is not to say that the only value of a university degree is as a route to successful employment, but it cannot be denied that it is an important dimension.

In the UK, where graduate outcomes and degree destinations has moved up the political and social agenda with the introduction of fees in England in 2006 and expanding regulations around teaching quality, there is an increasing focus on measuring the returns to the degree. The focus however is on graduate outcomes, using crude metrics such as graduate average salaries and the proportion of students who end up in graduate level jobs (ie, jobs that require a degree).

Economics does well in these measures, compared to other disciplines. The focus on outcome metrics distorts the difference between a university degree with a high signalling value, because of the wider reputation of a university, and a degree that prepares students well for life but is perhaps from a lower ranked or less well-known university. It is not clear from the outcomes metrics whether graduates have the skills they need to be effective, and progress, in the labour market. There is, as we will discuss, evidence that employers are concerned that graduates are not work-ready. Concerns have been raised about degrees being overly technical, and graduates lacking the ability to apply what they have learnt to real world situations, to communicate their ideas clearly to non-experts and to put questions into appropriate contexts. When the perceived skills gap is discussed, calls are often made for economics departments to solve the problem, although there has been little discussion of how to do this.

Our interest is in how skill development can be embedded in the teaching of economics, complementing wider opportunities for career management and skill development open to students from Careers Services, employer-led work experience opportunities, extra-curricular activities, and wider opportunities within an individual's network. We do not make a judgement about whether degrees are the most appropriate vehicle for developing employability skills, leaving that discussion for elsewhere, but instead focus on what the best approach to take is, assuming an economics department has made a choice to do more in this area.

Methodology

Interpretations of what employability means vary widely in the research (Tomlinson, 2012). Rich (2015) highlights that the policy focus on graduate outcomes typically entails helping students secure employment rather than achieve their 'best-fit career' (p. 10). For others, employability is a broad concept linked to graduates contributing effectively to society (Cole and Tibby (2013)). Between these definitions sits a wider view that considers employability in terms of preparing students for their long-

term careers (Lowden et al. (2011); McCowan (2015); Pegg (2012); Romgens et al. (2019)). Consistent with this idea we worked with academics, employers, and students in focus group discussions to define an employability objective for economics degrees to “*prepare students to get a good graduate-level first job and help them to develop skills to enable them to succeed at work and in their wider life*’.

Through these focus group discussions, and the Economics Network Employer surveys discussed below we have taken a narrower view by focusing on the set of specific employability skills listed in Table 1. The focus on a given set of skills allows for deeper discussion of whether and how these skills should be developed in a degree. The disadvantage is that we narrow responder focus and omit other skills, competencies and wider personal attributes that may be relevant (Suleman, 2016). The list of skills is consistent with the literature on employability in higher education.

Table 1: Employability skills considered in our research

Skill area	Our Interpretation
Communication	Ability to present ideas clearly to a mix of audiences in writing and/or in oral presentations. A distinction can be made between academic and non-academic audiences.
Application to real world	Ability to take economics concepts, models and theories and use them to answer policy or business questions relevant to the organisation. This includes being able to use economics principles and models to frame a question and understanding the need to abstract core features of complex models when using them for relevant real-world analysis.
Data analysis	Ability to work with data. All steps of data analysis can be considered, including finding or creating data, downloading data, analysing it, potentially with statistical or econometric packages, and making inferences based on the analysis.
Collaboration	Ability to work with others. This could be other economists or colleagues from other disciplines.
Wider employability skills	This category is used to capture a range of often-termed ‘softer’ skills including flexibility, reliability, can-do attitude, independent thinking, creativity and imagination, resilience, commercial awareness, time management and project management. These skills tend to be relevant for all disciplines.

In our research on these skills, we consider three inter-related research questions:

1. Are there gaps between the skills employers seek and observe in UK economics graduates and the skills that UK economics departments prioritise in their degrees?
2. How do UK economics departments embed the development of employability skills in their undergraduate economics degrees and how effective are the approaches used?
3. What challenges need to be overcome to improve the development of employability skills in UK undergraduate economics degrees?

Our understanding of employer requirements came from the [Economics Network Employer Surveys \(2012, 2015 and 2019\)](#). These surveys focus almost exclusively on organisations that hire economics graduates to work in specific economist roles, providing a bias in the results towards economics-specific careers, although the prioritised skills are consistent with what is found in literature on skills in general

and in our 2020 research, funded by the UCL Laidlaw Scholar scheme on what skills employers of social science graduates value.

To understand what was happening on the ground in economics degrees to help students develop skills alongside knowledge we conducted a 2019 survey of UK economics departments, focusing on degrees that have 50% or more of their credits in economics. The survey was completed by 39 departments out of a total of 95 eligible departments. We gained further insights from two focus groups involving employers, academics, and students. 66% of the survey respondents were from research-focused, top ranked, Russell Group universities. According to the Institute for Fiscal Studies (2018), going to a Russell Group university can increase earnings by 10% relative to an average degree. 40% of the degrees had cohorts greater than 250 students and 36% had small cohorts of less than 100 students. 54% of the respondents offered a four-year degree with a work experience opportunity, commonly called a placement year, as either optional or compulsory.

Our sample size is small, although the response rate of 41% is in line with what is considered good for online surveys (O'Leary, 2017). There is a selection bias concern with an assumption that those with the most to say, and most interest in the area, will have responded to the survey. These limitations need to be borne in mind and meant that formal quantitative analysis was not considered appropriate. We rely on a graphical and descriptive approach. We believe that this is sufficient to get a broad overview of what is happening in the economics departments that responded but limits the extent to which we can draw conclusions about all economics degrees.

Is there a gap between what employers are looking for and what is happening in degrees?

In this section we consider the employability skills that employers say are most important and compare these to the skills that economics departments say they prioritise in their undergraduate degrees. Table 2 summarises our findings. Results from 2012 and 2015 employer surveys are very similar to 2019. Economics Network (2010) and O'Doherty et al. (2007) confirm that alumni and employers were arguing for 'applying knowledge to real-world contexts' and 'communication' skills to be prioritised even earlier. Participants in our focus groups emphasised that employers take it for granted that graduates will have knowledge of economic concepts and methodologies, but they also want them to have strong professional skills so that they can be effective employees.

Table 2: Comparison of employer and economics department priorities

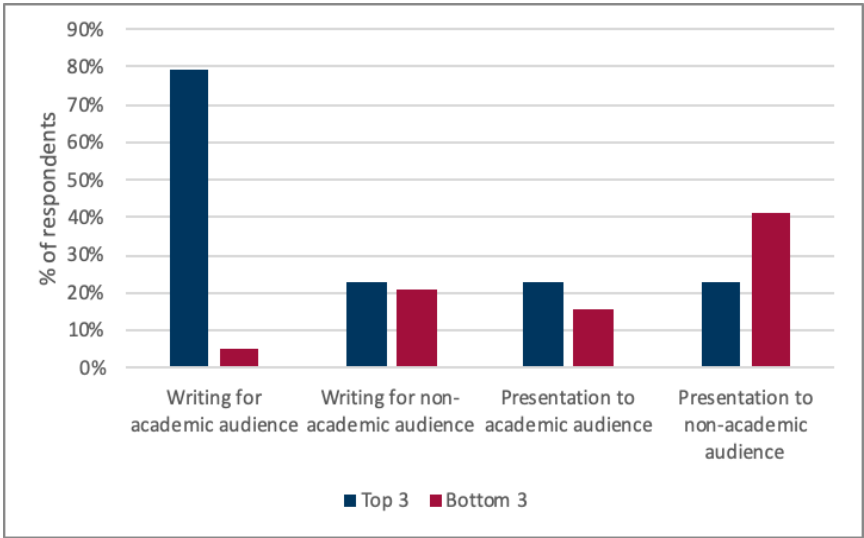
Skill area	Degree priority rank 1 = top priority	Employer priority rank 1= top priority	Employer concern about graduate skills
Communication ¹	3	2	High
Application to the real world ²	2	3	Medium
Data analysis ³	1	1	Low
Collaboration ⁴	5	-	High
Wider employability skills ⁵	4	4	High
Notes:			

- ¹Degree priority rank based on proportion of respondents to the 2019 survey of economics departments who said skill area was one of top 2 priorities. Employer priority rank based on average % of employers across 2012, 2015 and 2019 Economics Network employers survey who said skill is very important or somewhat important for economics graduates in relation to the following skill used in the employer survey: communication of economic ideas. Employer concern indicator based on average % of employers across 2012, 2015 and 2019 surveys who said skills was 'not very high' amongst economics graduates based on average across answers relating to the following skills covered in the employer survey: ability to communicate in speech and ability to communicate in writing.
- ²Degree priority rank based on proportion of respondents to the 2019 survey of economics departments who said skill area was one of top 2 priorities. Employer priority rank based on average % of employers across 2012, 2015 and 2019 who said skill is very important or somewhat important for economics graduates averaged across answers relating to the following skills: abstraction, ability to analyse economic, social and business issues, and framing. Employer concern indicator based on average % of employers across 2012, 2015 and 2019 Economics Network employers surveys who said skill was 'not very high' amongst economics graduates averaged across answers relating to the following skills covered in the employer survey: ability to apply what has been learned in wider context and problem-solving strategies and skills.
- ³Degree priority rank based on proportion of respondents to the 2019 survey of economics departments who said skill area was one of top 2 priorities. Employer priority rank based on average % of employers across 2012, 2015 and 2019 who said skill is very important or somewhat important for economics graduates based on answers relating to the following skills: ability to organise, interpret and present quantitative data. Employer concern indicator based on average % of employers across 2012, 2015 and 2019 Economics Network employers surveys who said skill was 'not very high' amongst economics graduates averaged across answers relating to the following skills covered in the employer survey: ability to analyse and interpret quantitative data, and fluency with IT/Computers.
- ⁴Degree priority rank based on proportion of respondents to the 2019 survey of economics departments who said skill area was one of top 2 priorities. Skill area not included in top 5 employer priority areas based on average % of employers across 2012, 2015 and 2019 who said related skills are very important or somewhat important for economics graduates. Employer concern indicator based on average % of employers across 2012, 2015 and 2019 Economics Network employers surveys who said skill was 'not very high' amongst economics graduates in relation to the following skills covered in the employer survey: awareness of cross-cultural issues, critical self-awareness and ability to work effectively with others.
- ⁵Degree priority rank based on proportion of respondents to the 2019 survey of economics departments who said skill area was one of top 2 priorities. Skill area not included in top 5 employer priority areas based on average % of employers across 2012, 2015 and 2019 who said related skills are very important or somewhat important for economics graduates. Employer concern indicator based on average % of employers across 2012, 2015 and 2019 Economics Network employers surveys who said skills was 'not very high' amongst economics graduates in relation to the following skills covered in the employer survey: adaptability, general creative and imaginative powers, and independence of viewpoint and judgement.

Economics departments and employers largely prioritise the same skills areas, namely communication, application to the real world and data analysis. Both say that collaboration and wider employability skills, such as resilience, are also important but are less of a priority. However, employers say that economics graduates do not have high levels of skill in the priority areas. It should be recognised that many of the survey respondents have only recently introduced activities designed to develop these skills and as a result there will be a lag before employers see improvements. The gap may also arise because economics departments interpret these skills in different ways to employers.

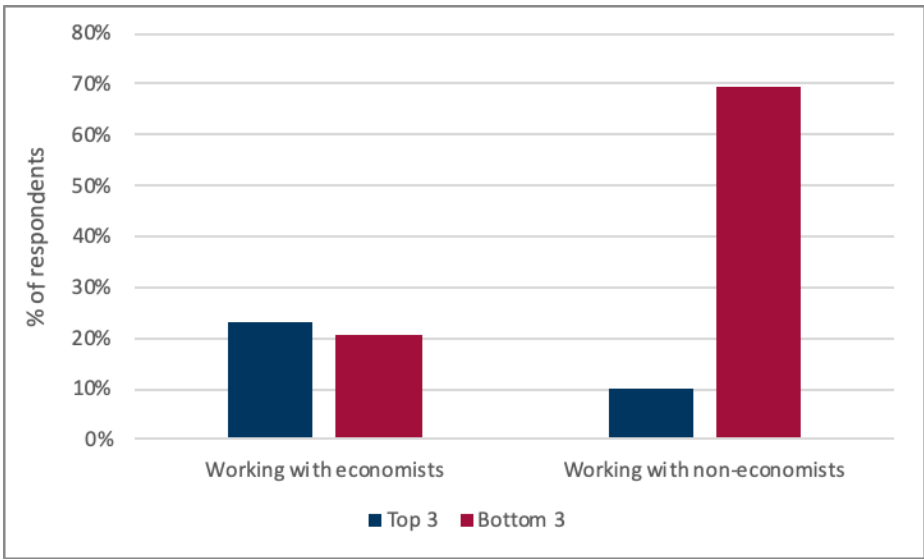
On communication, the focus is on traditional academic writing in degrees as demonstrated in **Figure 1**. Employers are looking for both written and presentation skills aimed at non-expert audiences, a skill that is not prioritised by economics departments.

Figure 1: Communication skills that were identified as Top 3 and Bottom 3 priorities by economics departments



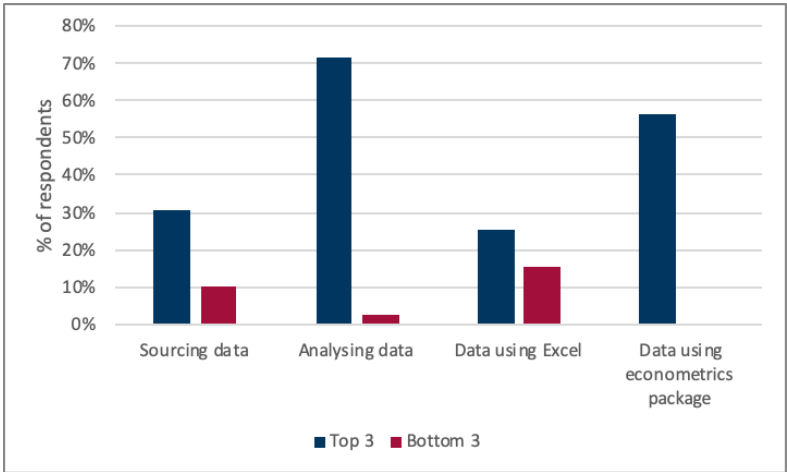
Similarly, for collaboration economics departments focus, albeit in a limited way, on working with other economists whereas employers are looking for graduates who are confident working with colleagues from any discipline. Indeed, as Figure 2 illustrates, collaboration with other disciplines is a low priority for most departments. Degrees with an integrated work experience opportunity place more emphasis on ‘collaboration’ and ‘wider employability skills’ than those without. This may be because students on these degrees have a greater need to develop these skills in the early years of their degree to secure placement opportunities. Alternatively, it could be because the placement experience itself provides more opportunities to develop the skills.

Figure 2: Collaboration skills that were identified as Top 3 and Bottom 3 priorities by economics departments



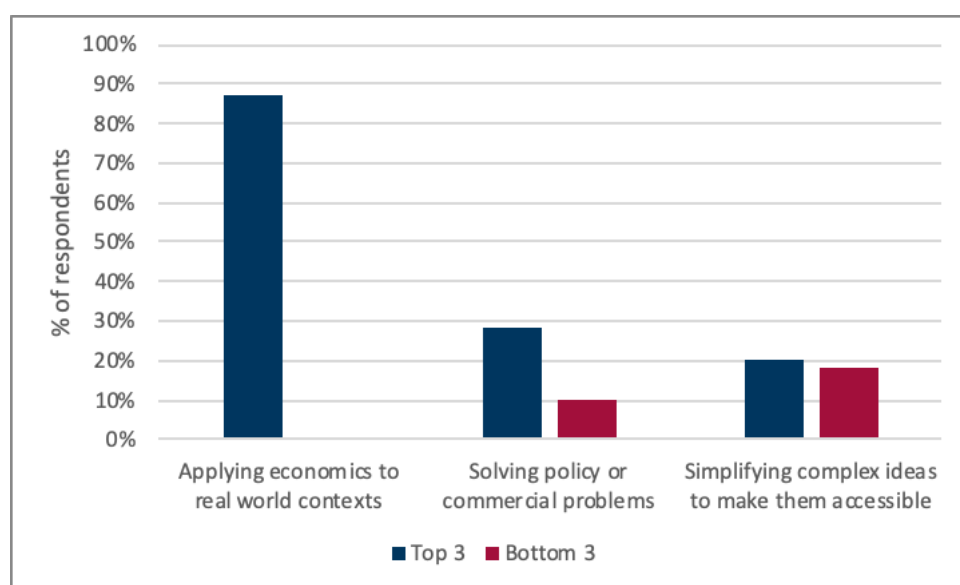
Considering data analysis, both employers and economics departments value strong technical/econometric skills. Data analysis and application to the real world are particularly high priority for research-intensive universities. However, employers value more basis skills such as being able to find, clean and organise datasets, as well as being able to use Excel and coding software. There is some, but limited focus on these aspects of data analysis in degrees, as illustrated in Figure 3. Academics and students at our focus groups suggested that there was increasing recognition of the importance of Excel training by academics with recently introduced initiatives or plans to provide training in the near future. The main other programmes that are used are Stata, Eviews and R.

Figure 3: Data analysis skills that were identified as Top 3 and Bottom 3 priorities by economics departments



It is harder to say for sure how employers and economics departments vary in their interpretation of ‘application to the real world’. The proportion of employers rating the ‘apply what has been learnt in a wider context’ skill level of economics graduates as ‘not very high’ is approximately one third and the proportion rating this skill as ‘very high’ is just 13%. This is a striking gap for what economics departments say is the top priority area in their undergraduate degrees. Employers are interested in graduates being able to analyse policy and commercial problems and being able to simplify complex ideas in an accessible way. Lecturers may explain to students how economics connects to real world issues rather than asking them to develop frameworks to analyse problems. This focus on connecting economics to real world contexts, rather than using it to solve problems and to simplify complex ideas is confirmed by the extent to which economics departments ranked different elements of ‘applying economics’ in our survey as shown in Figure 4.

Figure 4: Applying economics skills that were identified as Top 3 and Bottom 3 priorities by economics departments



The top three skills that employers are concerned that economics graduates do not have are ‘creative and imaginative powers’, ‘awareness of cross-cultural issues’ and ‘critical self-awareness’. This issue with low levels of wider employability skills is not unique to economics. Webb and Chaffer (2016) find that the emphasis lies too strongly on technical skills rather than wider professional skills in their review of accounting degrees in the UK. Pereira et al. (2019) echo these findings in their study of business, economics, and engineering degrees from several non-UK universities within Europe. They emphasise that while ‘hard skills’ may help graduates secure a job, ‘soft skills’ are necessary for succeeding in a job. Economics departments emphasised in comments to our survey and in focus group discussions that these wider employability skills are implicitly developed in the degree even if not explicitly prioritised. A more direct and explicit approach may be needed.

Our findings complement the literature. Coyle (2012) finds that economics graduates notably lack communication skills and the ability to apply economic knowledge, despite strong technical skills. Anand and Leape (2012) similarly emphasise the need to write and present complex ideas to non-economists. Rethinking Economics (2018) suggest that application is a key skill deficit facing graduates. They also suggest that graduates would benefit from having greater exposure to applied data analysis tasks such as obtaining and cleaning data and providing descriptive statistics. Anand and Leape (2012) similarly emphasise the need in policy-making for basic data gathering and cleaning skills, as well as the ability to generate data through surveys. These skill areas are not only priorities for economics

graduates. Archer and Davison (2008) consider a range of disciplines and identify collaboration and communication as top priority skills. Andrews and Higson (2008) suggest that important skills for business graduates are: working under pressure, strategic thinking, self- and time-management, a willingness to learn and the ability to accept responsibility. Pegg et al. (2012) detail the importance of general skills such as positivity and entrepreneurship. This suggests that the many employers who hire economics graduates alongside graduates from other disciplines may have broadly similar skill requirements to those employers engaged with our research.

Economics departments tend to focus their efforts on the more academic aspects of the skill areas. If an economics department wants to provide opportunities for students to develop skills that enable them to be work-ready it is not enough to focus on the skills most familiar to academics. An in-depth discussion with employers is needed so there is a common understanding of what skills mean in a work context. Employers in our focus groups noted that the nature of work is changing, for example big data and artificial intelligence may change employers’ requirements in the future. Keeping conversations open will therefore be important.

Are the approaches that economics departments are using effective for skill development?

Economics departments in our 2019 survey have made efforts to improve skill development in their degrees and yet employers still argue that graduates they hire do not have the skills that they expect. As noted earlier, this may be because the academics are focusing on different skill areas, or angles of a skill area, that are different to what an employer is looking for. Another potential reason for the persistent gap may be that the best efforts that economics departments put into skill development may not be effective. That is, the well-meaning choices around learning design and assessment choices may not be as successful as hoped for skill development.

Figure 5: Criteria for effectively embedding employability skills development in an economics degree

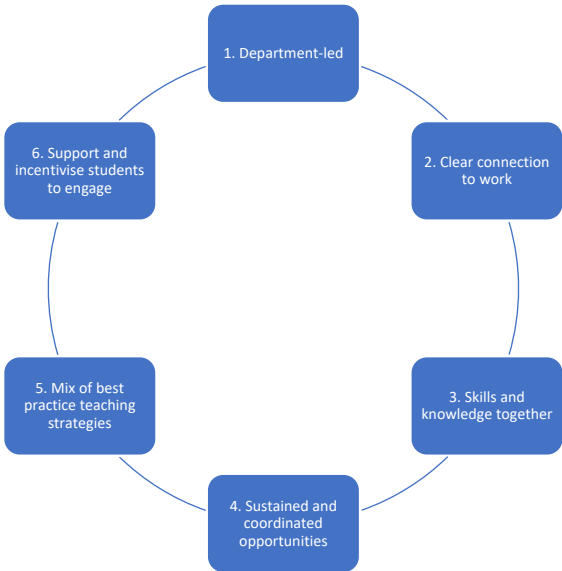


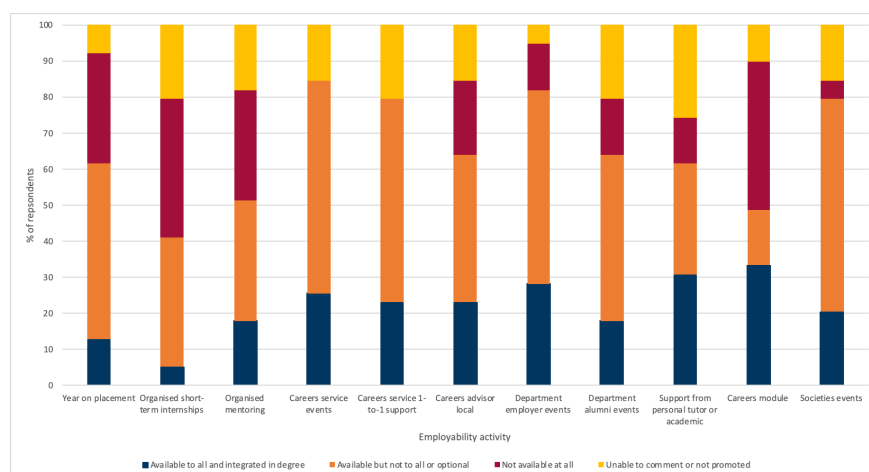
Figure 5 sets out the criteria¹, based on literature and ideas from our focus groups, that we think are needed for a degree to be effective in this area. Similar ideas can be found in employability models

¹ The criteria have been numbered for ease of reference in the report. The numbers do not reflect any prioritisation or ranking of criteria.

proposed by the Higher Education Academy (now Advance HE) and others (see for example Cole and Tibby, 2013). The criteria provide some indication of what ‘good’ looks like. An economics degree that meets some but not all of these criteria could be going a long way in facilitating students’ skills development. This is a starting point and there are no doubt other criteria that could be included.

The first criterion emphasizes the importance of an economics department making a conscious explicit strategic choice to focus on employability skills in the economics degree (Archer and Davison, (2008); Cole and Tibby, (2013); Cortronei-Baird, (2009); Lowden et al., (2011); OECD, (2016); Pegg et al., (2012); O’Leary, (2017); Priest, (2016); Rethinking Economics, (2018); Rich (2015)). When this criterion is met, there is buy-in from lecturers and strong leadership from the Head of Department, Programme Leads and similar individuals to support a culture that promotes employability. Department staff take the lead in designing and delivering activities, working in collaboration with careers services, student societies, other relevant parts of the institution, employers, alumni and students.

Figure 6: Range of employability support services available to economics students



In our survey, as illustrated in Figure 6, economics departments are at least partially meeting Criteria 1. They are taking responsibility for employability skills, with a range of support provided with careers services and societies. Economics departments are particularly active in connecting students to employers and alumni. It is unclear how much is coordinated within the degree and there is evidence, particularly from comments in the survey and in focus group discussions, that the drive tends to come bottom-up from a few individuals rather than top-down. This may limit the scale of any initiatives.

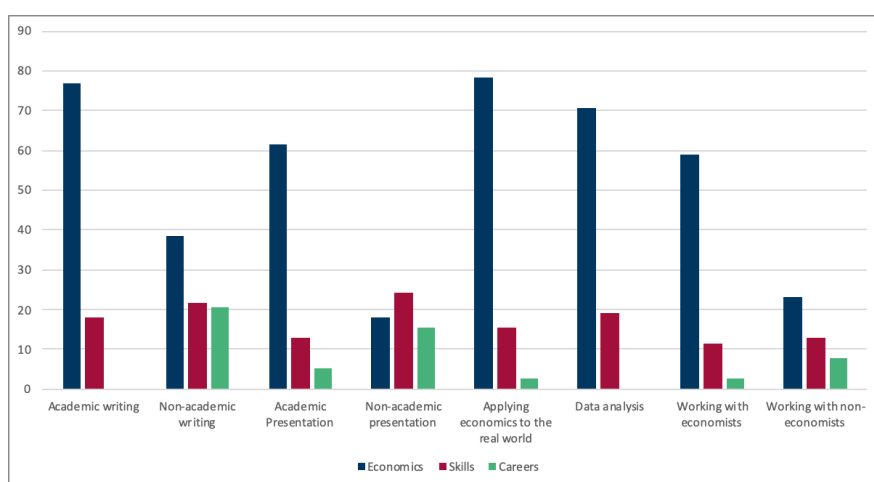
The second criterion is for the degree to have a clear connection to work (Andrews and Higgins, (2008); House of Commons Education Committee, (2018); Hills et al., (2003); Lowden et al., (2011); Mason et al., (2009); OECD, (2016); Storen and Aamodt, (2010)). This means that there are learning activities linked to the world of work, for example seminar discussions on topics that correspond to activities in interviews/assessment centres. A more advanced way to meet this criterion would involve incorporating work-based learning such as placement years and internships into the degree. There is, however, a limit on how many students can take up such opportunities, particularly accentuated during the pandemic in 2020 and 2021. This makes work-related learning, which is campus-based but linked to work, even more important.

UK economics degrees are making positive steps to meet Criteria 2, but the focus is more on work-based learning than work-related learning. Around 60% of the economics departments we surveyed had a placement experience as part of the degree. Comments suggest that these include research

internship opportunities provided within the department itself. In most cases these were optional or not available to all students. 31% said this type of work-based opportunity was not available at all. It is unclear to what extent activities in modules are closely related to what happens 'on the job' but there was little discussion of actively incorporating work-related learning in the degree and case studies in this area are rare.

The third criterion emphasizes that employability skills are best developed in a meaningful way in the context of the economics degree (Cranmer, (2006); Hills et al., (2003); Knight and Yorke, (2006)). This suggests that a department embeds both discipline-specific and general skill development, alongside subject knowledge, within economics modules. Bespoke skill modules may be a useful complement, but departments are discouraged from making these the sole opportunity for skills development. Similarly, careers skill development, for example CV and interview skills, should be considered distinct from employability skills which are best learned in the context of the subject-matter.

Figure 7: Types of modules providing opportunities for skill development



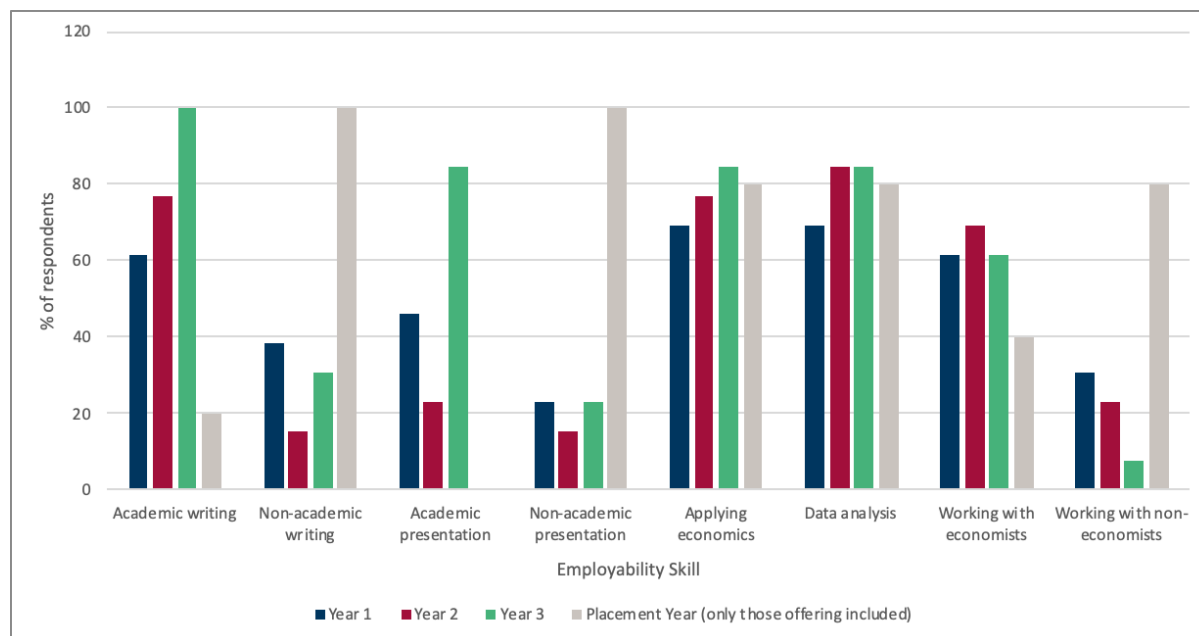
In our survey, opportunities for the development of academic writing, applying economics and data analysis are provided, according to our survey respondents, in economics modules rather than bespoke skills or careers modules. Opportunities to develop other skills are less frequent but are still mainly within economics modules. As illustrated in Figure 7, only non-academic presentation skills are more likely to be developed in bespoke skills modules, but there are limited opportunities for this. Skills-specific modules tended to be more common in degrees that offered a placement experience, perhaps because of a need to embed the skills earlier in those students going out to the workplace in their second or third year of study.

The fourth criterion emphasizes the need for opportunities for skills development to be available across all years to allow for consistent progression throughout the degree (Cortrone-Baird, (2009); Hills et al., (2003); O'Leary, (2017); Pegg et al., (2012)). The expectation is for a through line of skills development from first through to final year, with coordination across modules. This criterion takes account of the fact that skills development is an evolutionary process; students need to build up their skills over time through consistent practice. For example, considering data analysis, it takes time to build up required knowledge about techniques and familiarity with computer packages before being able to undertake an empirical project.

The survey results suggest that economics departments are providing opportunities in all years for academic writing, academic presentations, applying economics, and data analysis skills, as illustrated in

Figure 8. More is done in the final year, which may reflect a traditional curriculum where the focus is on understanding concepts and models in the early years, with greater opportunities to explore ideas more deeply in the final year. Students in our focus group discussions noted that many of their peers are unlikely to engage with skill sessions or activities early in the degree. Providing opportunities may not be enough. If economics departments think they are important, for example for later modules, they may need to be compulsory and assessed. Lecturers may also need to do more to explain the link between skills-related activities, the learning of economics in the degree and future careers.

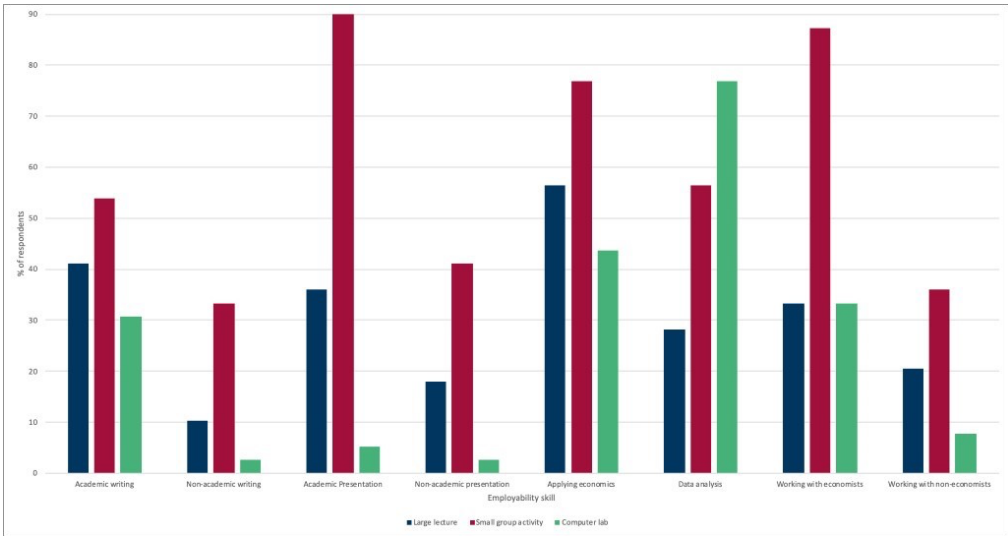
Figure 8: Year in the degree in which students get opportunity to develop skills



The fifth criterion relates to the idea that students need to have hands-on opportunities to practice skills in the context of the discipline (Anand and Leape, (2012); Andrews and Higgins, (2008); Becker and Watts, (2001); Cortronei-Baird, (2009); Coyle, (2012); Heron, (2019); Hills et al., (2003); Mason et al., (2009); Pegg et al., (2012); Rethinking Economics, (2018); Rich, (2015); Storen and Aamodt, (2010)). These activities should relate to what graduates might do in a typical job, such as engaging with the practicalities of empirical analysis and providing opportunities to communicate findings to different audiences. There should also be explicit opportunities for students to work with others, including multi-disciplinary opportunities to enable students to consider questions from different perspectives. Pegg et al. (2012) emphasise the importance of ‘experiential action learning methods’ and ‘integration with more traditional didactic approaches’. Our focus groups emphasised that departments should not try to ‘teach’ skills from the front. They suggested that activities should simply allow students to experiment with new ideas and methods.

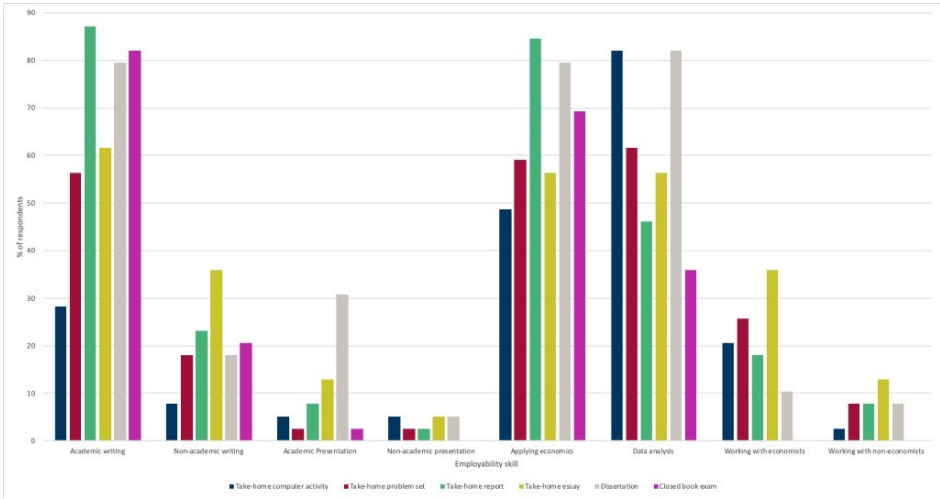
As shown in Figure 9, amongst our survey respondents, the large lecture is an important vehicle for skills development. Small group teaching, including in computer-labs, is important for applying economics, data analysis and team working skills. Small group classes are also where students are given the most opportunities for presentations and collaboration. Whether or not the skills are genuinely developed depends on how active students are in those classroom settings. If teaching is traditional in style, with delivery of knowledge from the front, it is likely that there is only passive engagement with skill development.

Figure 9: Classroom setting for skills development



A mix of independent learning activities are also used to develop skills as illustrated in Figure 10. It was emphasised in focus groups that resources need to be invested in to provide support to students with take-home activities, for example for extra office hours or extra support classes. How the take-home activity is designed matters if it is to lead to effective employability skills development. A closer look at the outputs that students produce shows that in these take-home activities there is a strong preference for traditional academic-style essays and presentations, with limited use of non-traditional writing outputs that might be targeted at non-expert audiences. Presentations are also largely academic, with few opportunities for other formats such as podcasts, videos or blogs. The survey responses show that economics departments place significant emphasis on the use of final year dissertations to develop academic writing, applying economics and data analysis skills. Our focus group participants recognised the value of dissertations but thought that there may be an over-reliance on them. It was noted that they were still academic in nature and there may be merit in requiring students to orally defend their ideas in these final year papers. There was also an issue of the dissertation being optional in many degrees which meant that many graduates may not develop the research and wider skills associated with writing a longer and deeper paper.

Figure 10: Skills development through take-home activities and closed-book exams

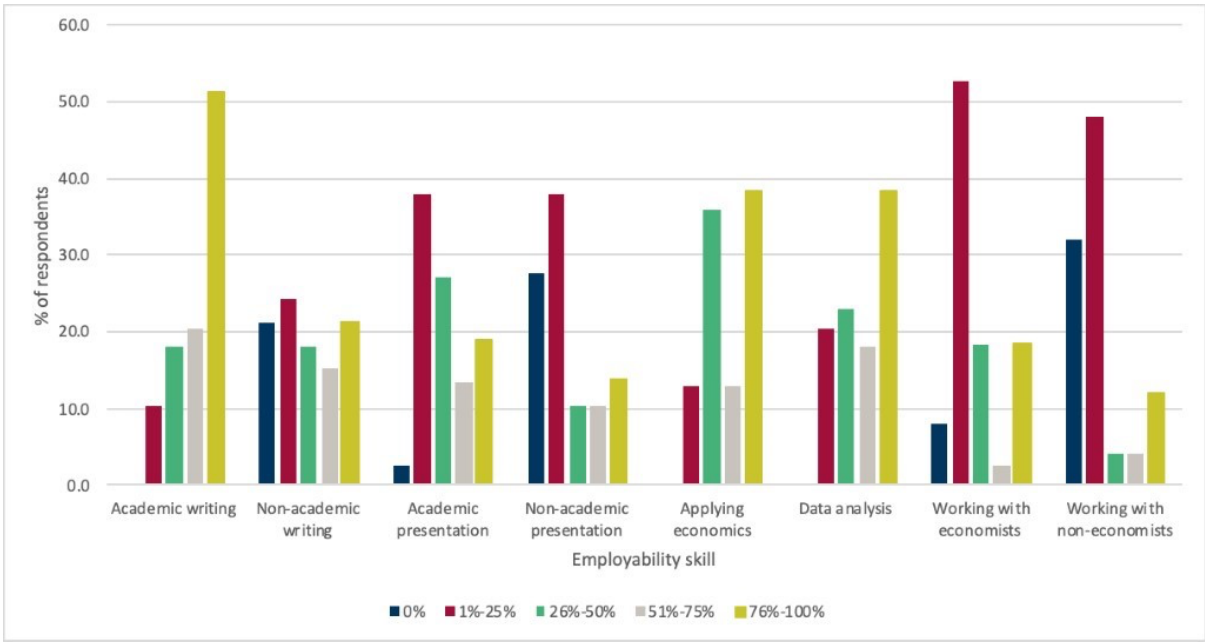


The final criterion is that the degree needs to provide incentives and inspiration for students to engage (Cortrone-Baird, (2009); Heron, (2019); Knight and Yorke, (2006); O’Leary, (2017); Pegg et al., (2012); Pereira et al., (2019); Priest, (2016); Rich (2015)). The incentivization would typically come from having skills-related activities included in compulsory modules, with at least some activities assessed summatively. Essentially, students would not be able to avoid the courses with skills-development in them before they graduate. Students should also understand, and be able to articulate, which skills they are developing. They should have access to support and advice, particularly those who struggle when left to their own devices, in recognition of the fact that developing employability skills does not come naturally to all.

Amongst those that responded to our survey it appears that much of the skills development happens in compulsory modules. It is not clear however whether the activities themselves are considered compulsory.

As shown in Figure 11, academic writing is the most heavily assessed skill. Both ‘applying economics’ and ‘data analysis’ skills are summatively assessed to a large extent as well, with a majority of respondents assessing at least 50% of the work. Collaboration is rarely assessed. Non-academic presentations and working with non-economists are the skills that are least likely to be assessed, with the latter never being assessed by almost one third of respondents.

Figure 11: Percentage of work linked to skill that is summatively assessed



It remains open for discussion whether the nature of the assessment links effectively to the skill that students are supposed to be developing. Our focus groups suggested that whilst closed book exams have significant practical and convenient benefits for academics, they are of limited use for developing and assessing most skills, perhaps apart from academic writing. Employers emphasised that memory and knowledge retention are of limited use in the modern workplace, where the internet allows individuals to instantly gather information on almost any topic, and experienced colleagues can be asked for information. The point was also made that how the exam questions are structured matters. If a sub-part of a mainly mathematical question asks students to think about how the analysis can be applied to the real world this may be considered sufficient to ‘tick’ the skills box but would not

adequately develop application skills, particularly if students choose to put less effort into this part of the questions. It was suggested that students should be asked to explain why a particular technique is the most relevant for analysing a problem rather than simply asking them to use the technique. There could be more focus on longer ‘discuss/evaluate’ style questions rather than ‘solve/prove’. It was also suggested that students should be asked to look at a ‘big picture’ question and asked to work out the structure of how best to analyse and evidence the question.

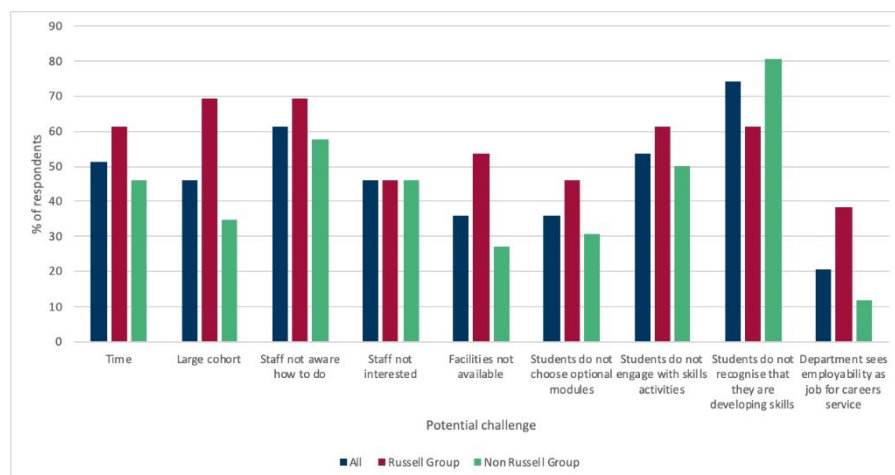
We found, in comments to our survey and focus group discussions, an increasing interest in 24-hour exams and open book exams. For example, in one department students were given a report to read ahead of the exam and instructed to create a one-page set of notes, which they could then use in the exam to answer questions on the report. Employers in the focus group indicated that this was both a more accurate representation of the workplace and encourages students to engage with actual research and independently identify the most salient points. Pegg et al. (2012) similarly suggest that any assessment must be ‘fit for purpose’ without compromising academic rigour, which may entail a move away from traditional ‘pen and paper’ written assessments. The focus groups further argued that leaving all assessment to the end of the year was unhelpful for effective skill development, which requires activities throughout the year to embed the skill and engage students.

Our 2019 survey data suggests that economics departments appear to be doing the ‘right thing’ by developing skills in a coordinated, supported and sustained manner across years and in economics modules (criteria 1, 3, 4 and 6). There is also an increasing focus on work-based opportunities through internships or placements, although the extent to which these are open to all students is limited and there are few examples of work-related learning activities in economics courses (Criterion 2). The part of the framework that appears weakest relates to the effectiveness of teaching and learning practices (Criterion 5), and a related sense that strategies and policies in this area (Criterion 1) are challenging to deliver on the ground. We therefore explore more deeply what the challenges are to delivering on an ambition to embed employability skills in a degree.

What are the challenges of doing more and doing it effectively?

Is it by no means an easy task, for an individual lecturer or a whole department, to effectively embed employability skills development into an economics degree. Economics departments responding to our survey were given a list of challenges and asked to report to what extent they were a problem.

Figure 12: Percentage of respondents who agreed challenge was a problem or significant problem



The main challenges, shown in Figure 12, are difficulties with getting students to engage and incentivising and supporting teaching staff.

We developed a set of ideas on how to get students to engage with skill development in their economics degree based on discussions in our focus groups, comments in the employers and economics department surveys, and evidence from the literature. We present the suggestions in Table 3. It is also important that students recognise, explicitly, that skill development is part of the degree. To do this, lecturers need to be transparent about what skills are being developed and clearly explain the connections between skills development and (assessed) activities inside and outside the classroom. Employers can help by explaining to students why it is important to develop skills and assuring them that skills development in the degree is valued.

Table 3: Suggestions on how to get students to engage with skill development

	Comments
Assess skill-related activities	<p>Unassessed skills activities and skills or careers modules that have no credit attached to them are more likely to be ignored by students. A small allocation of marks can act as a sufficient nudge.</p> <p>Don't go overboard. A balance needs to be struck between formative practice and summative assessment.</p>
Make sure that the skills part of the assessment is worth a sufficient amount of the credit	<p>If only a part of a part of a question relates to the skill, students may not concentrate on that part. Allocate marks according to how important skills development is in learning outcomes.</p>
Make sure students understand that the skill is needed to do well in the assessment	<p>To illustrate, consider a situation where a lecturer designs a discussion activity in a tutorial to help students develop communication and economics application skills. The discussion activity is not assessed but the lecturer assumes that students know that the related skills, for example in critical analysis and clarity of explanation, are needed to do well in the exam months later. The students may not make the connection and focus only on course content when preparing for the exam.</p>

On supporting and incentivising staff, the focus group participants felt that the most significant barrier to lecturers doing more, is that they have little professional incentive to do so. It was emphasised that much of the progress made in this area is done by a few individuals with a personal interest or passion about student employability. They get no credit other than personal satisfaction from improving the skills of their students. Most lecturers are incentivised to dedicate most of their time to research, as this determines promotion and career progression. Incremental changes are possible, particularly if support can be provided to lecturers, for example by teaching-focused colleagues, to limit the time and effort required. Encouraging lecturers to use approaches linked to their own research skills may also be a good starting point. Establishing processes to make it easier to connect with employers and developing open-source teaching materials that are aligned with what happens 'on the job' may also help. These support structures can help lecturers to work out what to teach and how to teach without needing to make significant trade-offs between content and skills and reducing, but of course not removing, the time required to make changes to a course.

Some economics departments were concerned about the impact of large cohorts and limited facilities on the extent to which skills could be effectively embedded in degrees. The focus group participants recognised that it may be difficult to design some activities for large cohorts, but they suggested that technology enabled more options. For example, discussion forums could be used to practice writing for non-economists, and online simulation games could be used to explore how to apply concepts and models. They also noted that more group work can reduce the marking load although it was recognised that this needed to be done carefully given concerns about free-riding. Similarly, more use could be made of peer feedback and peer assessment to alleviate the marking load of lecturers. Lecturers may need advice and support on the range of teaching strategies that could be used and how to use them.

Has the pandemic and shifts to online learning changed things?

Covid-19, and associated restrictions on and changes to higher education, have had a significant impact on what and how we teach. There is an interesting question as to whether the changes help, or hinder, efforts to develop employability skills.

Arguably, there are many ways in which the experience will have helped. By default, students will be developing resilience skills. Many, but not all, will also have improved their self-management skills and their ability to motivate themselves to learn. These are of course skills that all employers are increasingly looking for from employees in a changing and uncertain working world. Lecturers who have provided clear structures or scaffolding for online or remote learning will have, possibly without realising it, provided toolkits on organisation of learning. However, where this has not been provided, or potentially where the guidance became overly regimented, some students may have lost their way. This suggests that a more focused conversation on how to develop learning and self-management skills within a degree, whatever the delivery mode, are increasingly important.

Changes in assessment will also have had an impact. For example, a move to more open book assessments, a change made by many UK economics department, increased the potential for more research-focused projects and a mix of outputs including multimedia. Many of the 'alternative' assessment methods that UK economics departments switched to online are more in line with what employers recommended in our focus group discussions. Where Departments have moved to multiple assessments through the year, to help incentivise engagement, students studying remotely will also have been required to develop the skill of juggling multiple tasks simultaneously and prioritising what needs to be done when. The trigger for innovation in assessment lends itself well to an externality benefit of more skill development.

There have of course been challenges to skill development activities. Group work is feasible online, but students may have struggled to engage through unfamiliar platforms, particularly if crossing time zones and with peers they had not met before. Extra support is often needed in these cases. Related to this, the potential for lecturer-student interaction focused on discussions about what skills were being developed and why are unlikely to have been prioritised amid the many other challenges. This may be a conversation that will have to happen ex-post.

It is too early to tell what has changed permanently in the graduate labour market from a skills perspective and what economics education will look like going forward. There is some hope that moves to more structured support, active learning and mixed approaches to assessment will facilitate wider employability skill development. We intend to conduct another survey of employers and economics departments in 2022. This is part of a planned three-year cycle of research but will of course be particularly interesting as we see what impact, if any, changes in the world of economics

education due to the pandemic have had. We will find out how activity on the ground in economics departments has changed but it may take longer to see the impact on employer views on the quality of graduate skills.

Conclusion

Great efforts are being made by the economics departments in our survey to embed the development of employability skills in their degrees. They are on a journey and there is more work to be done to narrow the gap between what employers are looking for and what skills economics graduates have when entering the workforce. There is unlikely to be a 'one size fits all' checklist of teaching and learning strategies to use but we hope that this research provides departments interested in developing employability skills in their degrees with ideas on what to consider. This does not mean, however, that the burden of preparing students for life after university should rest solely with academics, or indeed that it should become the driver of how a degree programme is designed. What is needed is an open dialogue across an economics department driven by senior leadership, with support from careers support services and other relevant parts of an institution, about what can feasibly be done within the degree and how this can be communicated with students.

There is also a case for deeper dialogue between academics and employers about what is expected from graduates and what can feasibly be delivered in an economics degree. This should help academics understand better how to design work-related activities and assessments. It will also allow employers to highlight, in real time, if the skills they are prioritising are changing, as may be the case in a post-Covid workplace environment. This happens more naturally in disciplines with accreditation (eg, Architecture) or direct connections between the degree and work (eg, medical school) and needs to be created in economics. Open dialogue should also help employers better understand where on-the-job training may be needed for graduates for areas that do not fit in the limited time available to deliver an economics degree. A challenge here is that many (most) academics do not have direct connections with employers. There is a case for developing a network, through organisations like the Royal Economics Society and the American Economics Association, to open this dialogue at professional level to facilitate those connections.

Conversations between academics about the great work that is happening to develop skills in a degree need to continue. As we know for all areas of pedagogy in economics education, we get better by sharing what works and what does not work. Many of the teaching practices relevant for skill development align with those considered best practice for deep learning and research. Hearing about the value of particular teaching or assessment approaches from colleagues is more likely to persuade an economist to try something out than getting a suggestion from a careers or employability specialist. Many lecturers will feel more comfortable reviewing their courses in this context and be more open to considering research-based and active learning strategies for their teaching. Focusing on employability as part of what we do to train the next generation of professional economists emphasises that employability does not mean a degree becomes vocational or non-academic. If anything, it needs to meet the requirements of a reputable 'traditional' academic qualification and more.

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