### "AdvanceHE



# Are we speaking the same language?

# Aligning employability terminology between universities, students and employers

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# 1 Executive summary

This report presents the findings of a short project aimed at exploring the alignment of employability language between employers and universities.

The project was funded by Medr and Advance HE. It was conducted in response to recent recommendations regarding the need to better align the language of employability used by employers, and the language used within the delivery of higher education (Short, 2025).

#### Project background and objectives

The project began as a collaborative activity in the form of a task and finish group, with team members assembled from Aberystwyth University, Bangor University, Cardiff University, the Open University, Swansea University, University of Wales Trinity Saint David and Wrexham University.

The primary focus was to explore how well language used by employers aligns with the language used by universities and, by association, students. The timeframe limitations meant that the study focused on students' interpretation of employer's language. The task and finish group were required to report back verbally to the Community of Practice Symposium, held at Wrexham University in June 2025.

#### Methodology

We collected primary data in the form of student responses to a survey. We used a mixed methods approach.

We used ChatGPT to analyse job descriptions from a number of sectors and define a skills profile expected by employers.

We were then able to ask ChatGPT to construct two job descriptions. The first was 'explicit' in nature, using words typically used in graduate attribute statements and career service delivery language. The second was 'implicit' in nature – the description implied the latter language.

The students' responses were analysed to determine the extent to which students' perception and vocabulary of competencies aligns with employers' and how well students can decode and respond to the language used in job adverts.

#### **Key findings**

The need for better alignment of language between employers, students and those organisations that bridge the gap between them, is a challenge not only for HEIs but also other organisations. This is outlined in the literature review.

Students' responses were better targeted to the explicit statements than the implicit. This identifies a recruitment challenge for employers, but also a job seeker's challenge for graduates.

Students' personal backgrounds did not affect their performance, but this may be linked to the sampled population. Students' characteristics showed that neurodiversity could induce a different reading of an implicitly phrased job advert.

#### Recommendations

This report offers further support to Short's recommendation (Short, 2025) to work for a better alignment of academic and industry terminology. This is particularly in relation to helping students to decode the implicit language sometimes found in job descriptions.

There are strategies that may help alleviate the problems outlined.

Students need to be further supported to be able to map between implicit language and university statements such as graduate attributes.

Industry-facing experience should be considered as a powerful way to address the students' need to contextualise their skills and language for the workplace. This can take the shape of professional placements but could be more easily integrated in the curriculum in the form of projects with employer-defined briefs, assessment and/or mentoring.

Industry-led review of the language of job descriptions is recommended in the light of findings about neurodiverse populations, which could lead to implications for application of the Equality Act (2010). This is a highly significant, potentially transformative issue to address, which would necessitate further research to make a strong case.

There may be a need to ensure that institutional-level graduate attributes frameworks are adopted and phrased in subject-level specific terms, thus removing abstraction and ambiguity where appropriate. The subject-specific implementation of the frameworks needs to be communicated to students for clarity of skills they develop and how the students themselves can demonstrate these skills to recruiters.

#### **Dissemination event**

Marks, Rolland and Woolley disseminated the findings to colleagues from other Welsh HEIs at the Community of Practice Symposium in Wrexham, June 2025.

# 2 Context and motivation

#### 2.1 The language of employability

The language of employability is not without challenges, including the need for a fluid definition of 'employability' and one which is consistent across all stakeholders. For instance, Fotiadou's study challenges the naturalisation of language that promotes a specific neoliberal view of what employability is or means (2020). Fotiadou discusses how language used by HEI career services aligns with, and naturalises, a neo-liberal and government view of what employability is or should be. This might be considered at the expense of other views and definitions.

Dalrymple et al (2021) present a range of definitions of employability and summarise the importance of language and vocabulary in Advance HE's broader definition. This broader definition forms the starting point for Advance HE's Framework for Embedding Employability.

"[Advance HE's definition] signals a shift in vocabulary towards language used more by career guidance professionals such as 'career', 'life transitions', broader notions of 'success' – rather than 'employability' – and incorporates a range of achievements obtained at university beyond specific transferable skills determined by employers."

Dalrymple et al (2021)

However, less has been discussed on the alignment of language between the tripartite of employer, university and student partnership. Several studies have discussed the 'horizontal mismatch' between education provision and workplace needs, best summarised in Somers et al (2019), who attribute some of the mismatch to 'individual determinants'. While the latter is a very thorough consideration of the reasons for mismatch, language is not discussed. As will be discussed later, the mismatching between the language of employers and the language taught by universities could also be negatively impacting on graduates securing graduate-level and field-specific work.

#### 2.2 Graduate attributes

A place where universities often outline their offer to students in relation to developing their employability is in the graduate attribute statements, or similar statement frameworks. Published openly, graduate attributes outline the skill and competencies graduates will have developed during successful engagement with their course. Graduate attributes statements are usually institution wide, and so the general language used in their formation can lead to misunderstandings or disagreements at local levels within an institution. Wong et al (2022) reference studies by Jones (2009a, 2009b).

"[Jones 2009a, 2009b] ... found that discipline-specific interpretations and meanings for the same attribute (eg 'critical thinking') are not always the same."

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Wong et al (2022, p3)

Wong et al (2022) have also outlined the need reconcile the general and institutional level character of graduate attribute statements with the subject-level need to help students comprehend and understand what the statements mean. This includes how the statements map to their course delivery and opportunities,

"In practice, however, graduate attributes are often universally applied for an institution. As such, individual degrees and departments ought to be proactive to support students to decode and understand what these graduate attributes mean in the context of their study."

Wong et al (2022, p1351)

More recently in Wales, Short (2025) has explored with student and employers the perception of a mismatch between employer's expectations of graduates, and students' perception of their 'preparedness' for graduate roles (Short, 2025).

"The study revealed significant discrepancies between the skills that employers value and those that students believe they are acquiring."

Short (2025, p5)

Furthermore, Short outlines...

"There is often a disconnect between the terminology and skills emphasised in academic settings and those required in the workplace. Higher education institutions need to align their teaching and language with industry expectations to better prepare students for employment."

Short (2025, p37)

Short makes recommendations based on the study's findings. These include discussion of the mismatch in some of the terminology employers use, and the language taught to students as part of their courses. Short's recommendation in this area is to,

"Train students to use sector-appropriate language when describing their own skills and attributes."

Short (2025, p5)

### 2.3 The language of employers

It could be argued that one of the places 'the language of employers' may manifest itself most clearly is in the language of job descriptions. As with our universities publishing of graduate attribute statements, job descriptions are a source of examples of employers', or at least HR departments', use of professional workspace terminology. Here we might consider the problem of language to be of concern to both employers and universities, and moreover, through association with the latter, a challenge for students. For employers, who need to recruit an appropriately skilled and sustainable workforce, the problem might be how well their use of language in job descriptions aligns with the employability related language of the

applicants they wish to attract. This problem is explored by Spada et al (2024) in relation to the problems of recruiting appropriately skilled humanitarian aid workers in an ever more challenging world, where roles require multifaceted skillsets. The latter study uses the European Classification of Skills and Occupations (ESCO) definition of skills needed for specific job roles and tries to survey alignment between the latter and current job descriptions for the aid worker sector. Esco outlines the purpose of its definitions:

"The aim of ESCO is to support job mobility across Europe and therefore a more integrated and efficient labour market, by offering a 'common language' on occupations and skills that can be used by different stakeholders on employment and education and training topics."

ESCO (2024)

Spada et al (2024) found that in a survey of vacancies, there was often a lack of alignment between the language used in ESCO skillset definitions and the job descriptions published by humanitarian HR teams. The conclusion outlines that both parties need to take more note of each other when publishing their respective definitions. While the study explores specific skillsets, little is explored in terms of whether the skillset definition alignment can, in part, be attributed to a mismatch of language.

The emergence of AI technologies that can support repetitive task challenges such as the assessment of job applications against employer's requirements is apparent in the literature reviewed. Several recent studies have explored approaches to the use of IT and/or AI to analyse the language found within job descriptions. In the studies discussed here, AI/IT resources are used to try to reveal skillsets requirements in the job descriptions. When discussing developing training data for the use of creating AI tools for the automated review of job application/resume submissions, Skondras, Zervas and Tzimas (2023) outline:

"The widespread implementation of machine learning algorithms in natural language processing (NLP) has notably streamlined the resume classification process, delivering time and cost efficiencies for hiring organisations."

Skondras, Zervas and Tzimas (2023)

Another notable application of large language models to the language of employability is that discussed by Akkasi (2024). Akkasi outlines the problems of identifying requisite skills such as technical (hard) skills and non-technical (soft) skills in the job descriptions:

"Numerous job advertisements (ads) are published daily, each targeting various job titles. The information contained within these job ads serves as the primary potential source for identifying the requisite skills candidates must possess. However, the unstructured nature of this data poses challenges in capturing crucial information effectively."

Akkasi (2024)

The objective of the latter study is to help applicants identify any shortfalls in their skillsets:

"Once these skill gaps are identified, job seekers can receive recommendations for new skills or educational products to enhance their competitiveness in the job market and adaptability to evolving job requirements."

Akkasi (2024)

#### 2.4 Summary

The language used to articulate employability matters for many reasons, some of which are outlined above. One of the most important considerations must be how the language used by employers aligns with the employability language we develop with students as HE providers. Wong et al (2022) and Short (2025) have both called for a greater alignment regarding the language of employability between the tripartite stakeholders of employers, universities and students. Of course, the last two are closely linked parties, and while it is the responsibility of the institution, in partnership with employers, to ensure they are providing a prepared graduate workforce, it is also the responsibility of the student to engage with all the delivery offer at their university.

This study, in responding to the above call, embarked on a short research activity to contribute to knowledge in this specific area. The task and finish group developed a project where students were surveyed on their interpretation of the language of job descriptions. As will be outlined below, the starting point was to extract skills from existing job descriptions from different sectors.

Khaouja et al have outlined a study completed in 2021 where they developed their own system for analysing hard skillsets in 100 online job adverts across different sectors. In developing their own algorithm, their aim was to provide a system that could effectively identify hard skillsets from job descriptions found in several different industry settings. They outline that their system, potentially,

".... will not only help universities adapt their curricula to produce more employable graduates but will also give meaningful insights for job seekers."

Khaouja et al (2021)

In the interests of time, our study was shorter in scope compared to Khaouja et al (2021) and might be considered a pilot.

# 3 Methodology

#### 3.1 Our approach and research process

The purpose of this research was to explore whether universities, students and employers are aligned in their use and understanding of employability language, and to examine how this may impact students' ability to recognise, develop and articulate their skills for graduate employment.

We adopted a two-stage, mixed-methods approach, combining employer-focused job description analysis with student insight-gathering via a survey.

#### 3.1.1 Stage 1: employer language analysis

We collected a diverse sample of graduate-level job descriptions across four key sectors: business, sciences, creative arts and engineering. These were analysed using generative artificial intelligence to extract both explicit references to employability skills (for example, communication, problem solving) and implicit references conveyed through broader phrases (such as "working closely with others" as an indicator of teamwork). The analysis grouped terms into broader skill categories, allowing us to identify sector-specific patterns, recurring terminology and examples of potentially inaccessible or overly technical language.

To conduct the job description analysis, we used the following AI prompt:

Please help me analyse the attached job description with a focus on employability-related language. Specifically, I would like you to:

- 1 Extract and count every actual occurrence of key employability terms (eg communication, adaptability, initiative), including implicit references (eg collaboration inferred from phrases like "working closely with others").
- 2 Identify and highlight skill-related phrases that reflect key competencies (eg "manage multiple deadlines", "solve problems independently").
- 3 Assess the overall tone and language, noting any patterns, jargon, or sector-specific phrasing that may be unclear to students or early-career applicants.
- 4 Provide a word frequency analysis in a table, focusing on terms relevant to workplace skills and expectations.

The word frequency analysis was used in the survey design to inform which competencies should be explored in the questionnaire.

#### 3.1.2 Stage 2: student survey design

The findings from the job description analysis directly informed the design of a student survey, which explored students' understanding, confidence and interpretation of employability skills language. The survey was structured into three sections:

#### + Section 1: student background and context

In this section, the survey collected information on each student's academic and personal background to better understand the context in which they are preparing for employment. The survey collected information on students' subject area, year of study and any personal circumstances that may impact career preparation (for example, disability, health conditions, caring responsibilities).

#### + Section 2: perceptions of employability skills

This section explored how students perceive, prioritise and evaluate their confidence in demonstrating key employability skills.

The students were first asked, unprompted, what skills they believe employers expect of them.

Students were presented with a list of employer-valued skills and asked to rank them in order of perceived importance for graduate employment. They then assessed their own confidence in demonstrating each skill, providing a self-evaluation of their readiness in these areas. Finally, students were asked to identify where they believe they have developed each skill, selecting from a range of contexts such as academic study, placements, part-time employment, volunteering, or extracurricular activities. This provided insight into how students link their experiences to the development of employability skills.

#### + Section 3: language understanding and application

This examined students' ability to interpret employer language and evidence their own skills. In this section, students were shown two Al-generated job description extracts. One was written using explicit language and one used implicit phrasing, created using insights from our job description analysis. The students were asked to identify the skills being described and explain how they would demonstrate those skills.

#### **Explicit descriptor:**

We are looking for a motivated and organised individual to join our team in a fast-paced, client-focused environment. This role requires someone who can maintain strong communication with colleagues and clients, follow project-specific instructions precisely, and demonstrate excellent time management and organisational skills. You will be expected to work to tight deadlines with a high degree of accuracy, showing a detail-driven and results-focused approach. Excellent written and spoken English, alongside a professional client manner, is essential. The ideal applicant will be someone who is always striving to improve, takes initiative in their work, and values being a reliable team player.

#### Implicit descriptor:

We're looking for someone ready to be part of a team that values flexibility, curiosity, and shared purpose. You'll be encouraged to get involved across different settings, working with others through cross-functional collaboration and conversations with stakeholders. You'll need to be comfortable navigating priorities independently, while continuing to act within your professional boundaries and contribute meaningfully to evolving goals. The role suits someone who naturally builds trust, takes ownership where appropriate, and grows through reflection and feedback. We welcome those who bring their own insights, develop through doing, and enjoy shaping work with others in a fluid, supportive environment.

The complete questionnaire is appended to this report.

# 4 Results, analysis and discussion

#### 4.1 Language analysis in advertised vacancies

The analysis based on the process outlined in section 3.1.1 yielded two types of results: the quantitative results based on frequency of appearance and the qualitative results to contextualise them.

A total of 41 job descriptors were analysed covering health sciences, engineering, business law and finance, and arts and humanities.

The occurrence count was carried out by generative AI in each of the sectors outlined and the frequency of occurrence overall was used to rank the employer demand for competencies. The top 10 ranked results are in Table 1.

Table 1. Top 10 ranked competencies encountered in sampled job adverts

	Count of explicit mentions	Count of implicit mentions	Total count	Frequency of occurrence
Communication	70	103	173	28
Teamwork/collaborati on	46	93	139	22
Organisation/time management	45	68	113	20
Technical proficiency	87	68	155	19
Initiative	30	63	93	14
Adaptability	29	63	92	14
Attention To detail	17	40	57	9
Problem solving	28	46	74	9
Digital literacy	27	27	54	8
Professionalism	14	21	35	6

With the exception of technical proficiency, the count of occurrences and frequency follow the same ranking. This was traced to an overrepresentation of engineering roles in the sample, which places a high importance on this. The use of frequency for ranking was therefore preferred to generalise the prioritisation in a more discipline-independent manner.

The analysis of the language used in the adverts found sector-specific jargon in all the documents analysed. This can be identified as a barrier to employability in the first instance, although it is often seen as a prompt for applicants to research the role, if the terminology is unclear to them. This is sometimes compounded with the tone of adverts (for example, "You will take responsibility for design challenges"), which can convey a pressurised, rather than supportive, work environment.

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#### 4.2 Getting to know our respondents

To analyse the results, it is important to identify the characteristics of the population whose responses make up our sample.

The responses were gathered from 112 Welsh HE institution students. The respondents' profiles are show in Figure 1. Business, law and finance students are the dominating subgroup, notably at level 7 (Master's level students). Small sub-groups from arts and humanities, as well as health sciences and medicine also responded. Levels 4 to 6 make up 63% of the respondents and levels 7 and 8 represent 37%.

The disparity in respondent numbers by background implies that caution should be exercised when attempting to identify generalised trends from the data.

The students were asked to identify their barriers to employment, whether perceived, diagnosed or registered. Overall, 64% of respondents did not feel that they have any barriers to employment. Sixteen percent of the sampled population declared to be members of the BAME community and the next most represented minority groups were those declaring neurodiversity, first generation in HE participation, and low-income background, with 13%, 12% and 11% respectively.

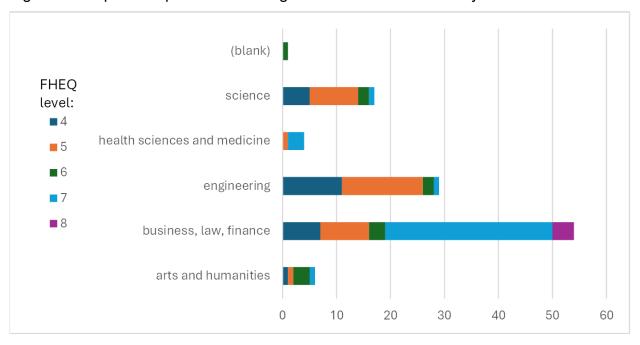


Figure 1. Respondent profiles according to sector and level of study

The strongest correlation was found to be between LGBTQ+ community members and neurodiversity (86% correlation, 5.3% of the total sampled population). While this is a small population sample, the correlation is not negligible given that it is commensurate with census information on sexual orientation (3.2%) (Roskams, 2023). The reciprocal incidence

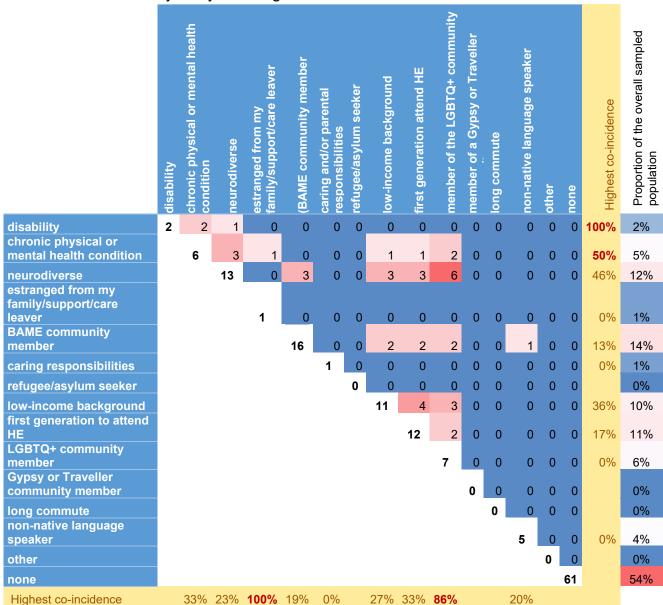
is 46% of the population sampled identifying with neurodiversity also identify as a member of the LGBTQ+ community.

Other notable background data for intersectionality analysis are:

- + all students with a disability also have a chronic physical or mental health condition
- + 50% of those with a chronic physical or mental health condition are neurodiverse.

The detail of the background data for intersectionality analysis is given in Table 2.

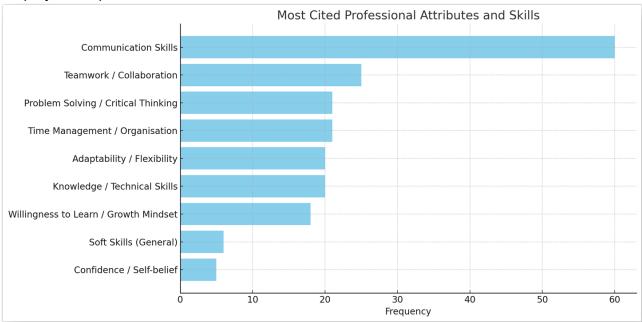
Table 2. Intersectionality analysis background data



#### 4.3 Do students understand what is expected of them?

When the students were asked what type of skills and competencies were expected of them, their responses showed an overall excellent awareness of graduate recruiters' expectations.

Figure 2. Respondents' nine most cited competencies and skills as their perception of employers' expectations



Some of the responses did not come in any of these categories – for example, resilience was only cited twice. Dedication was also mentioned several times. Both could come under "willingness to learn" but in short answers, with no opportunities for respondents to contextualise their answers, only an explicit and first level reading is used in this study. This is consistent with the use of generative AI to process the results. Consequently, and of relevance to the employability language, it highlights the importance of using language semantically very close to that used in job adverts when applicants respond to an advert that may be processed by AI in its shortlisting stages.

One response showed misalignment with expressed employer expectations: "To succeed you need to be vigilant, calculated and merciless". While it may be a misunderstanding of the questionnaire by the respondent, it is an insight into their expectation of workplace values.

The alignment with the job adverts (Table 1), expressed as employer perspective in Figure 3 shows a broad agreement, but the respondents significantly undervalued initiative, which ranked fifth in adverts, and also did not cite attention to detail, digital literacy and professionalism.

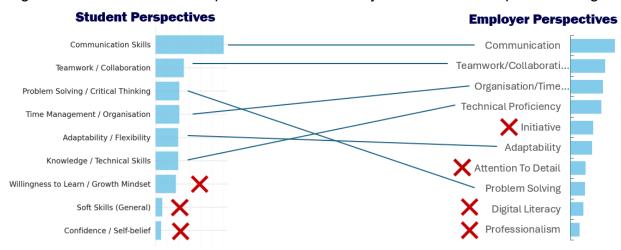
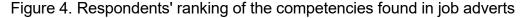
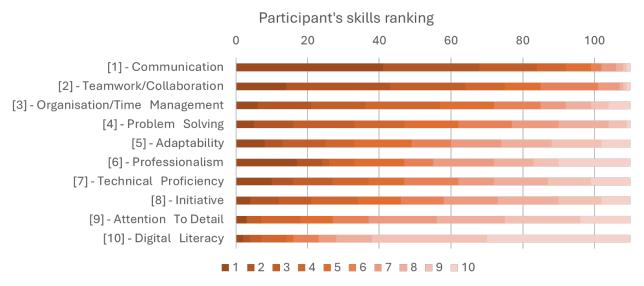


Figure 3. Match between competencies and skills in job adverts and responses in Figure 2

Once students were presented with the list compiled from adverts analysis, most of the traits not mentioned in the unprompted exercise were still low ranked, with the exception of professionalism.





It is important to consider how the students perceive their own ability to develop the relevant skills. It gives an insight into their perceived alignment between studies and careers paths. It is clear they expect to develop most of the essential skills in their academic work (Table 3). The second-ranked opportunity they identify is in placements and internships. This is particularly important given the context: all job adverts were selected as graduate roles with no experience required, and all respondents are students. The language used in the adverts is therefore perceived by the students as a requirement to have already gained experience prior to graduation.

This observation is notably true of professionalism, a subjective trait, and of communication skills, technical proficiency and adaptability. This finding is reinforced by the high ranking of part-time work as a skill development context. This is an indicator that either:

- + students do not believe that education alone can provide the skills necessary to access graduate level roles, or
- + students believe that to be competitive on the graduate job market, their skills have to be proven in a context outside education.

Development status Don't know Academic work 16 18 **42 13 51** 10 38 8 Part-time work 23 30 6 13 4 7 Personal projects 14 22 25 24 Placements/internships 33 25 17 36 14 31 23 17 25 68 Volunteering, student societies or leadership roles Other context (specify below) 

Table 3. Where do students expect to be able to develop the relevant skills?

# 4.4 Are students confident that they can fulfil recruiters' expectations?

When the students were asked about how confident they are that they can meet the employers' skills requirements, they were most confident about their teamwork skills (36% confident, 55% very confident), then about their adaptability and problem-solving skills (89% confident or very confident). This is followed by communication skills (85% confident or very confident).

The confidence profile shown in Figure 5 is very high, with most of the responses expressed as neutral, at least, or positive (confident or very confident). The skills they are least confident about are technical proficiency and initiative, although the most negative levels of confidence were expressed about communication and professionalism.

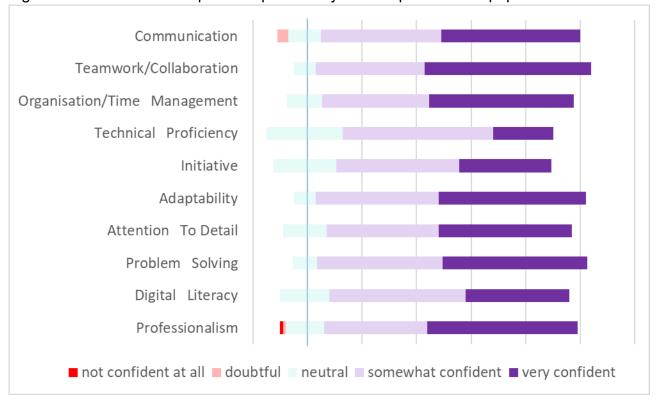


Figure 5. Likert confidence profile expressed by the sampled student population

Of the four skills that students felt confident about, they indicated that they expect to develop three of them in a professional context (either placement or part-time work), whereas the two lower confidence-ranked skills are expected to be developed or demonstrated through academic work or personal projects. This is an indicator that the responding sample population may include a significant proportion of students who have already experienced work in a part-time or placement context. This is all the more likely as 80% of the students who responded they were confident or very confident about their adaptability, teamwork and communication skills were also the students who responded that they would develop it in an extra-curricular context. This correlation drops to 46% for problem solving, and 38% for technical proficiency. This interpretation is conjectural at this stage, as no data in this brief study was gathered about the students' work experience. This is a gap in the data that should be explored in a future extension of the research.

It is worth trying to identify some of the main influencing factors. When scoring confidence from not confident at all to very confident from -2 to 2, a confidence index can be calculated for each skill as sum of confidence levels multiplied by the proportion of responses at this level. These can be observed individually or summed to give an overall confidence level across the skills for the sub-population considered.

The confidence level for the overall sampled population was 11.95. This increases to 12.08 for students with no barriers. This is only a small increase, mainly accounted for by organisation and attention to detail, where they scored higher.

Conversely, when this analysis was made for those with disabilities, chronic conditions and neurodiversity (health and related criteria), the overall confidence level was 10.81. Confidence levels in most skills are affected negatively, with the exception of teamwork, initiative and problem solving.

The students with social barriers (caring responsibilities, care leavers, first generation attending HE, BAME and/or LGBTQ+ community members, or non-native language speaker) did not show significant departure from the overall cohort, or from those with no barriers, with an overall confidence score of 11.81.

# 4.5 Are students able to decode recruitment language and contextualise it?

#### 4.5.1 Trait identification task

Chat GPT was used to assist in the analysis of students' answers to the explicit and implicit job description extracts. Students were first asked to simply list the key desirable skills in the passage they had read. The students were asked to identify only three skills in the adverts shown in section 3.1.2.

In the analysis of the student responses, Chat GPT was prompted to accept synonymic phrases for the traits, for example 'attention to detail' was coded as 'accuracy'. Students were most easily able to identify 'communication', 'organisation' and 'accuracy' as the main key traits within the text, with a particularly high level of agreement for 'communication' and 'organisation' (Table 4). Traits like being 'results-focused', 'adaptability' and 'reliability' were less readily identified by students, despite 'results-focused' and 'reliable' being stated verbatim within the text passage.

Table 4. Results for explicit task. Skills students identified from the extract

Trait	Number of mentions	Frequency of mentions
Communication	88	78.6 %
Organisation	74	66.1 %
Accuracy	55	49.1 %
Initiative	34	30.4 %
Teamwork	28	25.0 %
Professionalism	22	19.6 %
Results-focused	9	8.0 %
Adaptability	6	5.4 %
Reliability	5	4.5 %

The same analysis was applied to the implicit text task. Here, we found a lower degree of common agreement among students on which were the key desirable traits being sought within the implicit job description text (Table 5). Only around half of students mentioned 'teamwork', 'initiative' and 'adaptability' as key traits identified within the text.

Table 5. Results for implicit task. Skills students identified from the extract				
Trait	Number of mentions	Fr		

Trait	Number of mentions	Frequency
Teamwork	55	49.1 %
Initiative	54	48.2 %
Adaptability	51	45.5 %
Communication	41	36.6 %
Personal development	34	30.4 %
Professionalism	34	30.4 %
Independence	19	17.0 %
Time management	15	13.4 %
Accountability	14	12.5 %
Leadership	8	7.1 %

#### 4.5.2 Comparing the results of the trait identification task

Comparing Table 4 and Table 5, we observed that for the explicit task, there was greater agreement among students about which traits were key. For example, 78.6% identified 'communication', and 66.1% identified 'organisation'. In contrast, in the implicit task, the highest percentage of mentions (for 'teamwork') was only 49.1%, indicating lower consensus. It is perhaps unsurprising that when traits were stated clearly or could be easily synonymised (for example, 'attention to detail' = 'accuracy'), students found it easier to extract and agree on them.

The implicit task also produced a broader distribution of traits with lower frequencies, suggesting that students interpreted the implicit text in more varied ways. This reflects the interpretive nature of implicit information: without clear cues students may infer a wide range of trait expectations based on different aspects of the text, leading to a wider spread of responses and less agreement.

While the explicit text might have been clearer for some traits, other traits that were stated verbatim in the explicit text were still overlooked; some traits that were literally stated (for example 'results-focused' and 'reliable') were not widely identified by students (only 8% and 4.5%, noted these respectively). This may point to a lack of attention to certain parts of the text, a possible focus on more familiar or commonly emphasised skills, or difficulty recognising the importance of those traits even when plainly stated.

The types of traits identified differed between the two results. While the explicit task yielded better identification of certain traits; for example, students mainly identified operational or technical traits such as 'organisation' or 'accuracy', the implicit task seemed to draw out

more interpersonal or personal growth traits such as 'teamwork', 'initiative', 'adaptability', 'personal development' and 'independence'. It appears that the interpretive nature of the implicit text triggered reflection of students' behavioural and soft skills. Implicit text may therefore also be useful to promote a deeper understanding of and response to an organisation's work culture.

#### 4.5.3 How do students' characteristics affect their perception?

While there is variability, students' characteristics do not appear to influence their reading of the explicit text significantly. The characteristics explored were barriers to employment, and more specifically neurodiversity. The response frequency from each sub-group of the population is shown in Figure 6 and Figure 7. When one characteristic is specified on the chart, all others are confounded in the data, so intersectionality was not explored.

In Figure 6, where responses to the explicitly phrased advert are shown, some deviations appear with initiative cited more frequently by students with one or more barriers to employment, and accuracy, teamwork and professionalism cited with a lower frequency by students from a business, law and finance background.

The reading of the implicit advert was more open to interpretation, which resulted in one more skill category cited as an answer (Figure 7). There is also a flatter distribution of the frequency with which each skill category is cited. The neurodiverse community shows the highest departure from the general trends with comparably low number of responses for teamwork and independence, no response citing time management and a much higher frequency of professionalism in their responses than other groups.

Figure 6. Skills perceived as required by students in the explicitly phrased job advert, split by personal characteristics

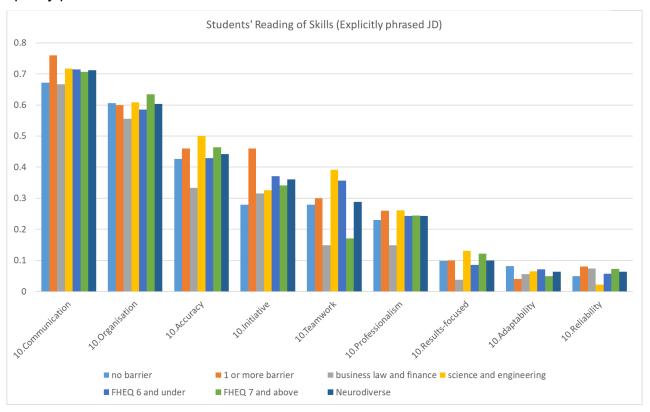
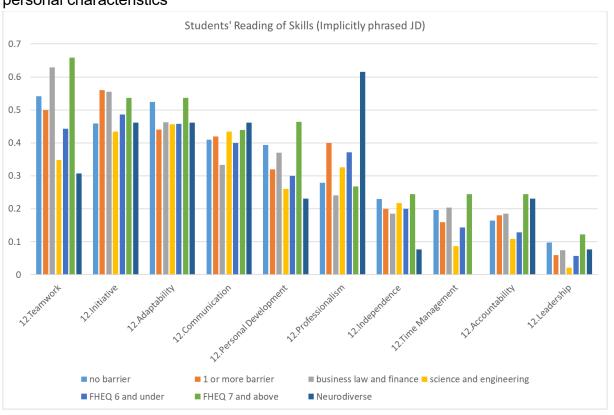


Figure 7. Skills perceived as required by students in the implicitly phrased job advert, split by personal characteristics



# 5 Reflection and conclusion

The research work was carried out with a view to gauge the understanding that HE students in Wales have of employability language. The study was designed to gauge terminology alignment, confidence and contextualisation and students' reading of specific extracts. As a short research exercise, this was achieved. The research presented needs to be contextualised and may need to be seen as a lead generation and prioritisation opportunity for further research. Notably, the responses from various students' backgrounds was a great opportunity but also yielded some imbalances (for example, in discipline or level of studies), sometimes with some intersectionality so strong that it cannot be compensated (for example, ethnic minority representation in medicine and health science, or the discipline correlation to undergraduate or postgraduate level of study).

As a reflection on the research exercise, it is apparent that employability practitioners in career services or academics play a very important role. They are at the pinch-point of a communication funnel between students and employers. They need to present and articulate to students the breadth of what employers may expect, while still keeping to generalised and manageable (teachable) categorisation priciples. By contrast, employers may have very nuanced expectations and each student may have a unique way to express each skill. The employability services and academics therefore need to make sure that students are not only taught these broad categories, but also how to read and understand the nuances that may be expressed through a job advert, or background information about the role and company. Much of the information may be implicit and expressed through culture and values.

Despite the acknowledged limitations of the dataset, some clear trends appear:

- 1 Students in the sample population are knowledgeable about what is expected of them, shown by a good match in vocabulary used by the employers and students.
- 2 Students are confident overall that they know how they can acquire and demonstrate the skills they are expected to have.
- 3 Students showed they can understand the expectations based on a job advert with excellent agreement when it is phrased clearly, but implicit phrasing results in disparities and differences in understanding that may discriminnate against some groups.

The study leads to a recommendation for further research, with an enriched dataset to fill the gaps where highlighted throughout this report. A longitudinal approach to the research would be highly beneficial, notably to understand whether confidence and graduate-level job attainment are correlated or whether the students' confidence may be misplaced. Finally, a lot of attention needs to be paid to the writing of job adverts, the tone and the clarity, which may fall short of finding the right candidate when a definite profile is sought, but this could be exploited when a cultural fit is preferred over a very definite skills profile for integration in a company.

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# 6 References

Akkasi, A (2024) 'Job description parsing with explainable transformer based ensemble models to extract the technical and non-technical skills', *Natural Language Processing Journal*, 9: 100102.

Dalrymple, R, Macrae, A, Pal, M and Shipman, S (2021) *Employability: a review of the literature 2016-2021*. York: Advance HE.

ESCO (2024) What is ESCO? Luxembourg: European Skills, Competences, Qualifications and Occupations (ESCO). Available at: esco.ec.europa.eu/en/about-esco/what-esco

Fotiadou, M (2020) 'Denaturalising the discourse of competition in the graduate job market and the notion of employability: a corpus-based study of UK university websites', *Critical Discourse Studies*, 17 (3): 260-291.

Jones, A (2009a) 'Generic attributes as espoused theory: the importance of context', *Higher Education*, 58: 175-191.

Jones, A (2009b) 'Redisciplining generic attributes: the disciplinary context in focus', *Studies in Higher Education*, 34 (1): 85-100.

Khaouja, I, Kassou, I and Ghogho, M (2021) 'A survey on skill identification from online job ads', *IEEE Access*, 9: 118134-118153.

Roskams, M (2023) *Sexual orientation, England and Wales*. Newport: Office for National Statistics.

Short, F (2025) What are the key attributes of a Welsh graduate and how can we foster the development of these attributes? York: Advance HE.

Skondras, P, Zervas, P and Tzimas, G (2023) 'Generating synthetic resume data with large language models for enhanced job description classification', *Future Internet*, 15: 363. Available at: <a href="https://doi.org/10.3390/fi15110363">doi.org/10.3390/fi15110363</a>

Somers, M A, Cabus, S J, Groot, W and van den Brink, H M (2019) 'Horizontal mismatch between employment and field of education: evidence from a systematic literature review', *Journal of Economic Surveys*, 33 (2): 567-603.

Spada, F, Caruso, R, Notarnicola, I, Belloni, S, De Maria, M, Magon, A, Conte, G, Prendi, E, Pata, X, Duka, B, Rocco, G and Stievano, A (2025) 'Analyzing readiness for interprofessional education among health program students using hierarchical clustering', *Journal of Interprofessional Care*, 39 (3): 391-398. Available at: <a href="https://doi.org/10.1080/13561820.2025.2452973">doi.org/10.1080/13561820.2025.2452973</a>

Wong, B, Chiu, Y T, Copsey-Blake, M and Nikolopoulou, M (2022) 'A mapping of graduate attributes: what can we expect from UK university students?' *Higher Education Research and Development*, 41 (4): 1340-1355.

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