A Guide to UK League Tables in Higher Education

Sally Turnbull

HESPA
HIGHER EDUCATION STRATEGIC PLANNERS ASSOCIATION

hepi

Higher Education Policy Institute

About the author

Sally Turnbull is Head of Planning and Insight at the University of Central Lancashire and is Chair of the Higher Education Data Insight Group at the Higher Education Strategic Planners Association (HESPA). Prior to working in higher education, Sally worked with the public, private and third sectors in economic regeneration and developing strategic responses to social challenges relating to housing, health and young people.

HESPA's Higher Education Data Insight Group aims to raise awareness and deepen understanding of higher education data. It aims to encourage informed debate about the enduring value of the UK's world-class higher education sector and we look forward to welcoming others to the conversation as a consequence of reading this report.

Acknowledgements

Contents

A Guide to UK League Tables in Higher Education

Introduction

University league tables have evolved from printed tables that were generally produced as newspaper supplements, to highly-sophisticated online tools, that can be tailored to take account of the user's own preferences and criteria. Love them or hate them, they are here to stay.

League tables form part of the information students, parents and other key stakeholders draw on when forming opinions about higher education providers. League tables can also appear to be suitable for other uses. For example, a number of universities use league table positions to quantify their strategic ambition and/or measure their performance. A high ranking is clearly desirable given league tables' influence on public perceptions of quality. However, those responsible for university strategy and policy should take care to ensure that, in using league tables in this way, they are not unwittingly encouraging behaviour that focuses on areas that they had not intended to prioritise.

Following on from a previous HEPI publication by Bahram Bekhradnia on international rankings, this guide examines the metrics used within the three main UK league tables – *The Times & Sunday Times* Good University Guide, the *Guardian* University Guide and the *Complete University Guide*.[1] It is intended to serve as a reference tool and offers insights into how the wealth of data that league tables present can be understood. It also highlights some of their limitations, in the hope that awareness of these will enable stakeholders to make more effective and appropriate use of them.

A Guide to UK League Tables in Higher Education

1. University league tables – an overview

There are several league tables and other rankings concerned with higher education:

- **UK rankings:** The three main rankings are published by *The Times* & *Sunday Times*, the *Guardian* and the independent *Complete University Guide*. Data provided on platforms such as Unistats and Which? University can be used to create rankings of sorts, but this is not their primary purpose.

- **UK specialist / niche rankings:** There are also some ranking tables which focus on niche aspects of higher education, such as People and Planet's University League, which ranks UK providers by environmental and ethical performance.

- **International rankings:** World university rankings are compiled by *Times Higher Education*, Quacquarelli Symonds, Shanghai Ranking Consultancy and the U-Multirank consortium.

This guide focuses on the three main UK league tables, but many of the issues noted are relevant to other rankings.

Each compiler has developed their own methodology. Most differences occur within the data definitions applied – for example, sometimes slightly different groups of students are included or excluded. Other differences occur within the calculations that are applied to the data – for example, the scores assigned to Research Excellence Framework (REF) outcomes. However, although all three compilers create rankings at both provider and subject levels, the *Guardian* builds subject tables first and collates these to create its overall provider-level

table. In contrast, *The Times* & *Sunday Times* and the *Complete University Guide* create the two types of tables separately, using a more limited set of metrics at subject level.

The methodological differences can lead to quite different overall positions in different rankings for individual providers. For example, in the 2018 rankings, The University of Central Lancashire featured in 67th position in the *Guardian* overall table, in 93rd position in *The Times* & *Sunday Times* and in 95th in the *Complete University Guide*.

General notes on the data

The quality of the data on UK higher education is good compared to that available elsewhere in the world. However, very little of the information used in the league tables has been collected specifically for use within these rankings. This means that some of the interpretations applied come with a number of caveats that are not always immediately apparent.

Latest data

The latest datasets available to league table compilers are mostly at least several months old. This is because the majority of data are drawn from annual submissions by higher education providers to the Higher Education Statistics Agency (HESA).[2]

At the end of each academic year, records detailing the characteristics, activities and status of students and staff at each provider are prepared as a summary of the year just completed. Financial records follow soon after. HESA then processes and analyses the data to release key statistics and provide bespoke analyses and datasets to league table compilers (among many

other users of the data).

The majority of the data used in league tables, therefore, relate to the previous academic year, and, since the first tables are generally published in April, has been compiled at least six months previously. Some data were collected at the very start of the academic year, so are actually 18-months old by the time rankings are published. Moreover, some of the metrics use data from multiple years, so the time between the event being measured – such as a student leaving a particular course – and this featuring in a league table can be two years or more.

League tables, therefore, do not present an accurate picture of a provider as it is now. The figures are still the latest available, and are among the best information there is to help inform students making decisions about future study – even though they may be a couple of years away from enrolling – but this does limit their usefulness for other purposes, particularly strategic decision-making.

This latter use is tempting to some who are new to university boards or higher education policy. The collection of consistent data across all institutions does appear to make league tables an ideal source of benchmark data. Moreover, although each institution has more up-to-date figures for its own performance, this is not generally held in the same format as that presented in league tables and the lack of comparative data makes assessment more challenging. In reality, league table data contribute in a very small way to a full understanding of university strategic performance.

Apples, pears … and oranges

The higher education sector is increasingly diverse. Within the UK, this is widely regarded as a strength, but it presents a challenge to those seeking to make comparisons between large numbers of providers. At the time of writing, the most inclusive ranking table covered 129 providers, a relatively small subset of the over 700 providers on the HEFCE register.[3] A number of common definitions have been developed to help reduce inappropriate comparisons, but these cannot entirely overcome the differences in the nature of provision and in reporting cultures between different providers.

One common approach to facilitating comparability is to narrow the student populations that are included. Generally, the focus is on young (under 21), full-time undergraduate students studying for a first degree. This is appropriate to one key audience of most league tables – school leavers and their parents. But it means that providers recruiting high proportions of mature, part-time or postgraduate students are not well-represented.

Comparisons between different providers are also made possible through use of subject coding systems, enabling compilers to identify which courses can appropriately be compared with each other and which cannot. The main coding system the sector uses for such purposes has been developed by HESA and the Universities and Colleges Admissions Service (UCAS) and is known as the Joint Academic Coding System (JACS).[4]

JACS is a complex, hierarchical system, but the level of detail

provided and the language used in subject descriptions mean that it does not lend itself easily to use within league tables.[5] So, compilers have each created their own subject coding frameworks and they map providers' courses to these frameworks. In many subject areas the mapping is relatively straightforward, but there are inevitably some programmes which could be categorised in more than one way. So a judgement is required, particularly with programmes that cover more than one subject area, such as International Law with Business. Some compilers ask providers to advise on how best to do this mapping and the majority of providers participate in this exercise because it helps to ensure good visibility of their courses. Such visibility can have a big impact on applications – conversations with fellow planning professionals have concluded that it is generally better to appear in a low position in a subject table than not to appear at all. Although this might appear counterintuitive, removing a subject has the effect of implying that a provider does not offer such courses and has been found to result in fewer applications.[6]

The differences between providers also influence league tables in ways which are very difficult to detect. For example, research does not feature explicitly within the ranking produced by the *Guardian* and is only referenced directly by a couple of metrics within the *Complete University Guide* and *The Times* & *Sunday Times*. However, the volume and intensity of research at different providers affect the numbers of academic staff employed as well as the resources available within libraries, which are both included in other metrics – see below for more details.[7]

All in all, league tables are in many ways comparing apples with pears and oranges, and this does not allow the rich diversity of

the UK higher education sector to be appreciated.

Next best thing

Much of the essential value of higher education is difficult to quantify. So there are no agreed standards against which providers can be measured. Academic peer review is generally regarded as an essential ingredient, but to do this properly is very resource intensive. In league tables, therefore, compilers use proxies to represent the unmeasured (or unmeasurable). This issue is by no means unique to university league tables, but it is helpful to understand the ways in which it plays out. The best illustration of this relates to teaching quality.

The mechanisms for assessing teaching quality are evolving with the introduction of the Teaching Excellence Framework (TEF) and the Annual Provider Review process, but they generally result in a small number of categorical outcomes – for example, the TEF awards awarding participating providers with Bronze, Silver or Gold status.[8] Such outcomes do not show sufficient differentiation between providers to allow their use within league tables. So instead data on student satisfaction from the National Student Survey (NSS) are used to represent teaching quality. The NSS is an annual survey of final-year students, which asks them to reflect on how satisfied they are with a range of aspects of their learning experience.[9] Agreement with statements such as 'staff are good at explaining things', 'staff have made the subject interesting' and 'the course is intellectually stimulating' does not equate to a robust and impartial evaluation of teaching quality. It is simply the most useful set of data that is easily available for the vast majority of higher education providers. It is useful to a point, but not definitive.

A Guide to UK League Tables in Higher Education

Degrees of separation

The nature of National Student Survey data also illustrates another issue that league table compilers have to grapple with. Mean satisfaction scores across the sector tend to fall within a ten-percentage point band. So ranking compilers resort to using figures to at least one decimal place in order to avoid large numbers of providers sharing the same rank.

In contrast, there are some well-established differences in scores between different subject areas. These can create exaggerated distinctions between providers, purely because of the different mix of subjects in their portfolios. Some subjects have significantly higher mean scores than others and the range of scores also tends to vary. For example:

• the median student : staff ratio in 2016 was 7.8 for Dentistry, but 17.2 for History;

• similarly, median scores for entry tariff (the grades of A-Level or equivalent qualifications required for entry to a course) were 493 for Dentistry and 314.5 for History.[10]

Compilers use their knowledge of these differences to make adjustments to scores used in overall ranking tables so that their impact is reduced but, critically, the methodology for this is not published. So it is impossible for the general reader to assess how effective this is or to estimate the extent of any remaining residual effect.

To prevent extreme scores – whether positive or negative – from having too great an influence on rankings, some compilers exclude outlying results and replace them with values that are

within the normal range. This is a defensible statistical approach, but can be frustrating for providers who find themselves effectively classified as 'too good to be true', though no one complains when their extreme low scores are adjusted.

In order to control the extent to which any one metric influences the overall total score within a league table, compilers apply weightings to each indicator. In some cases, users are able to adjust these weightings themselves, to allow greater emphasis to be placed on the factors they regard as most important. For example, the *Complete University Guide* allows users to change the metric by which universities are ordered.

Adjustments to weightings can have a significant impact on the resulting rankings – for example, small and specialised providers tend to have higher student satisfaction ratings. So increasing the weighting applied to metrics using National Student Survey data will improve the overall rank of some providers at the expense of others. Noting the default weightings used in each ranking is, therefore, essential for a full understanding.

These issues mean that some of the apparent differences in scores between different providers is exaggerated.

2. What's being measured?

On first reading, the descriptions provided by the compilers of the data and calculations used to construct each metric seem fairly straightforward. But dig beneath the surface a little, and it becomes clear that a number of important caveats apply. Some of these are flagged by compilers in the accompanying notes, but some prior knowledge is required to fully appreciate their impact. This section explores each metric in turn and identifies the main factors at play.

The full list of metrics used is illustrated in the following table:

Guardian	The Times & Sunday Times	Complete University Guide
• Entry qualifications	• Entry qualifications	• Entry qualifications

• Student satisfaction:
  • Satisfied overall
  • Satisfied with teaching
  • Satisfied with feedback
	• Student satisfaction:
	  • Student experience
	  • Teaching quality
		• Student satisfaction

• Student : staff ratio	• Student : staff ratio	• Student : staff ratio
• Value-added score	• Completion	• Completion
• Graduate careers	• Degree classifications	• Degree classifications
• Spend per student	• Graduate careers	• Graduate careers
	• Research quality	• Research quality
	• Services and facilities spend per student	• Research intensity
		• Academic services spend per student
		• Facilities spend per student

The detail of the data and calculations used within each of the different university league tables varies both from table to table and over time. The following overview of the metrics used by the *Guardian*, *The Times* & *Sunday Times*, and the *Complete University Guide* refers to the 2018 versions. It is important to note that changes in the availability of data mean that

methodologies will continue to evolve over time. Revisions to the Research Excellence Framework, the introduction of the Teaching Excellence Framework and the replacement of the Destination of Leavers from Higher Education (DLHE) survey with the new Graduate Outcomes survey mean that further changes to league table metrics are highly likely in the near future.

Entry qualifications

One of the first questions that many applicants have about a particular course concerns the grades required for admission. Information about typical offers is readily available from providers. But there can be a marked difference between the grades specified when an offer of a place is made and the actual grades achieved by students admitted to a course. Importantly, the data used in the league tables focus on the latter, because when information about qualifications is collected from students, no distinction is made between what was required and any additional qualifications gained.

Since not every student studies A-Levels prior to applying to higher education, information about qualifications is expressed in terms of UCAS points. This allows the equivalent value of alternative qualifications to be represented appropriately. The problem with this approach is that there is a broad range of qualifications which carry UCAS points and several of these are only relevant to the admissions decision in a very small number of courses. For example, Music practical and theory examinations at grade six and above carry UCAS points, which are important to the admissions decision for Music and related courses, but would be unlikely to be given more than cursory

regard by science-based departments.

The data are not sufficiently granular to allow all such qualifications to be excluded, so the figures used in rankings include most qualifications with a UCAS tariff value that students have reported to UCAS or their institution. This gives an interesting indication of how well-qualified the average student is, but is not a firm foundation for decisions about entry criteria – either by the applicant choosing where to apply, or by the provider looking to set entry thresholds. Instead, applicants should refer to provider websites for information on typical offers. In setting entry requirements, providers use information on the impact of prior attainment levels on success rates for their courses, while also watching their competitors very closely.

The table below identifies how entry qualifications data are used by compilers.

Data and source	UCAS tariff points gained by students commencing study with each provider in the previous academic year. Taken from the HESA student record – an annual collection of student data submitted by higher education providers for regulatory and funding purposes.
Usage	All three compilers use the average tariff score achieved by new students aged 20 and under who took A-Levels and other equivalent qualifications with a UCAS tariff value. Different weightings are applied, but these data are used in both main and subject tables.

Student satisfaction

Data from the National Student Survey are used in all three of the tables to cover teaching quality, the student experience and student satisfaction. Different compilers use different sub-sections of the data to allow them to focus on specific aspects in more or less detail – for example, separating the questions

about the academic experience from those addressing organisation and management. Generally the weighting given to National Student Survey data is higher than for other metrics.

Much has been written about the strengths and weaknesses of the National Student Survey and a recent review led to a range of changes to the 2017 survey.[11] It is a rich source of data on students' views about their course and elements of their broader experiences of studying with their chosen higher education provider. As such, it arguably deserves its central place in rankings tables, which are aimed at helping prospective students choose where they should study. But it is not an impartial review of teaching quality. Nor does it represent the views of all students – only those in the final year of courses that last for more than one year are surveyed.

The table below identifies how student satisfaction data are used by compilers.

Data and source	Results from the most recent National Student Survey – an annual survey of final year students, commissioned by HEFCE, carried out by Ipsos MORI and analysed by Texunatech. The survey takes place between January and April each year, with results released in the following August.
	In 2017, the National Union of Students (NUS) led a boycott of the NSS in protest against its links with the TEF which in turn was linked to fee increases. As a result, 12 universities had too few respondents (below 50 per cent of those eligible) for their results to be published.
	The questionnaire was revised for the 2017 survey, so changes to the precise questions used should be expected. At the time of writing, only *The Times* & *The Sunday Times* guide has used the new data, adjusting the questions used for the 'student experience' metric. Institutions affected by the boycott were not penalised for the lack of data for these metrics.

Usage	**Guardian**:
	Used for three metrics in main and subject tables:
	i) Satisfied overall: Agreement (%) with the 'overall satisfaction' question ('overall, I am satisfied with the quality of the course').
	ii) Satisfied with teaching: Agreement (%) with the set of questions relating to 'teaching on my course'.
	iii) Satisfied with feedback: Agreement (%) with the set of questions relating to 'assessment and feedback'.
	The Times & **Sunday Times:**
	Used for two metrics in main and subject tables:
	i) Teaching quality: Scores are averaged over the questions relating to 'teaching on my course', 'assessment and feedback', 'academic support' and 'learning opportunities'.
	ii) Student experience: Scores are averaged over the questions relating to 'organisation and management', 'learning resources', 'learning community', 'student voice' and the 'overall satisfaction' question.
	Complete University Guide:
	Used for one metric in main and subject tables:
	i) The average score for all questions in the survey, except the three relating to 'learning resources', is calculated and then adjusted for the subject mix at the provider.

Student : staff ratio (SSR)

Class sizes are of interest within all forms of education, but are not possible to capture accurately for higher education from the data available to league table compilers. This is partly because very few courses maintain a constant class size throughout. Most programmes of study involve a mixture of teaching methods – lectures, seminars, tutorials and, for some, laboratory-based or practical sessions – which operate with different-sized groups of students. Many have elements of

optionality, so students on a particular course do not all study the same modules. Another reason is that reporting activity in the detail required to capture class sizes would be very labour-intensive – such information tends to be held across multiple systems and not in a format that is easy to report on.

Student : staff ratios do not, therefore, show class sizes. Instead, the metric shows the total number of students (often, but not always, those aged under 21 on entry) divided by the total number of academic staff with teaching responsibilities at provider level. This calculation is also replicated at subject level, using the coding systems referred to above to allocate staff and students to appropriate subjects. It is far from perfect, but is the best proxy currently available (and while a recent review of student : staff ratios by HESA made some methodological tweaks, it failed to come up with a better solution that did not require significantly more data collection and reporting by providers).[12]

The main problems with this approach are centred around how the total student and staff populations are put together. For example, staff who do some teaching but are mostly involved in research activities are weighted the same as staff who spend all of their time teaching. In addition, assumptions need to be made about the amount of time each student spends in the classroom or other types of formal academic 'contact'. To facilitate this, staff and student numbers are calculated as full-time equivalents (FTE), rather than simple headcounts. However, in some circumstances, this has to be estimated, such as when students are involved in work-based placements. The level of input provided by academic staff during this period can vary

significantly, but this is not addressed within the data provided to HESA, so a standard reduction is applied. Also, many providers work in close partnerships with other organisations to create a strong mix of professional and academic expertise within their teaching teams, but only a fraction of the staff involved may be employed by the university concerned. This is particularly commonplace within medical and other healthcare settings. Only academic staff who have a contract of employment with the higher education provider are included in student : staff ratios.

Another issue with student : staff ratios concerns how the two populations are connected. The consistent coding system – the 'key' which allows the two datasets to be joined – used for both staff and student data is the HESA cost centre coding. Cost centres were originally created to support funding allocations and to recognise that some subjects cost more to deliver than others. Because they provide the only effective subject-level link between student and staff datasets, they are now used for a range of additional purposes. But different criteria are used by higher education providers to allocate staff and students to the cost centres and it is not always the case that lecturers are coded to the same cost centre as the students they teach.

So both student and staff populations are approximations, especially at subject level, and, while the student : staff ratios created from these might provide a rough indication of the size of teaching groups, they should not be used by anyone looking to assess the quality of the classroom experience or an appropriate use of resources.

The table below identifies how student : staff ratio data are used by compilers.

Data and source	HESA student and staff records – annual collections of staff and student data submitted by higher education providers
Usage	All three compilers use full-time equivalent student numbers divided by full-time equivalent staff (with teaching responsibilities) numbers. The **Guardian** uses these figures in both main and subject tables, **The Times** & **Sunday Times** and the **Complete University Guide** use SSRs in the main table only. Different weightings are applied by each compiler.

Completion rates

Metrics on completion are based on one of the annual performance indicators produced by HESA and show the percentage of full-time UK domiciled students starting a first-degree course who are projected to gain a degree.

The full methodology is complex, but in summary, this performance indicator takes a cohort of students and tracks their actual progress from the start of their studies and into year 2. A mathematical model then takes into account the characteristics of the different types of students within the cohort, to create a projection of the proportion likely to gain a degree or other qualification in the future.[13] So it is not the actual number (or proportion) of students who complete their degrees, but a forecast of what that proportion is expected to be.

This is because not all full-time higher education courses are three years in duration and a significant minority of students take longer to complete their courses – sometimes life

A Guide to UK League Tables in Higher Education

intervenes and people need to take time out. Reporting the actual statistics at the end of three years would, therefore, under-represent success rates. But extending the timeframe beyond three years would lead to an unacceptable delay in reporting, so the statistical model used allows these later finishers to be accounted for without increasing the time taken to release figures.

This is an important performance indicator for UK higher education, particularly when set alongside other performance indicators that address the widening access agenda. But those looking to improve performance against this metric find a few challenges in their path:

1. The indicator is only produced at whole institution level. The complex methodology makes it challenging to replicate, so gaining insights into patterns of performance at subject or department level (and thereby identifying weak spots to address) is difficult.

2. Setting targets for performance improvement needs to take into account the time lag between the opportunity to influence success and the publication of the results – institutions have two years to support students through, then must wait another six months for data processing. This means that the data published during an academic year cannot be influenced within that year.

3. HESA has data from all higher education providers, so is able to track students who transfer from one provider to another and therefore does not count such occurrences as negative outcomes. For an individual provider, it is not possible to be certain whether a student who leaves

has moved to study elsewhere or dropped out of higher education altogether.

The table below identifies how completion rates are used by compilers.

Data and source	HESA Performance Indicators (projected outcomes) – annual statistics calculated by HESA based on providers' student records
Usage	**Guardian:** Not used **The Times** & **Sunday Times** and **Complete University Guide:** Both rankings use the percentage of students expected to complete their course or transfer to another institution in their main tables only.

Degree classifications

This is one of the more straightforward indicators in data terms, yet its use as a performance indicator is controversial. The metric uses information about the degree classifications gained by the most recent graduates (for example, first-class, upper- or lower-second-class, or third-class honours) and focuses on the proportion awarded a first or upper-second-class degree – termed 'good honours'. Those gaining integrated Master's awards (four-year courses which result in a higher-level Master's (MA/MSc), rather than a Bachelor's (BA/BSc) degree) are also included in the good honours population.

Questions around the use of these metrics include concerns about grade inflation and the lack of acknowledgement of the progress made by different students. The easiest way for a provider to perform well on this type of metric is to relax academic standards and award higher classifications to greater numbers of students. But in the long run such an approach threatens to undermine the academic credibility of the provider

A Guide to UK League Tables in Higher Education

concerned. A bald measure of degree classifications fails to take account of the fact that a student entering higher education with a string of A grades under their belt has a much gentler gradient on their trajectory towards a first-class degree than their peers who attained the minimum entry requirements.

The table below identifies how degree classifications are used by each compiler.

Data and source	HESA student record
Usage	**Guardian:** Not used **The Times** & **Sunday Times:** Percentage of graduates achieving a first or upper-second class degree. Four-year first degrees are treated as equivalent to a first or upper-second. (Used in main table only.) **Complete University Guide:** The number of graduates with first or upper-second class degrees is divided by the total number of graduates with classified degrees. Enhanced first-degrees, awarded after a four-year course, are treated as equivalent to a first or upper-second. (Used in main table only.)

Value-added

In an attempt to improve the metrics based on degree classification alone, the *Guardian* has created a 'value-added' score, which aims to measure the distance travelled by a student between entry into higher education and graduation. This recognises that prior academic achievement is a strong indicator of likely success at degree level. So underlying the figures are a series of calculations on the probability of a student with specific entry tariff points achieving a particular class of degree. To score well on such a metric, a provider needs to be proficient at recruiting students with lower-tariff points

and enabling them to exceed attainment expectations.

This metric is particularly useful in highlighting which providers have high proportions of students achieving first or upper-second-class degrees simply because they recruit large numbers with high levels of prior attainment. However, although distance travelled is measured to some extent, only that which results in a first or upper-second-class degree is rewarded. This means that a provider might be excellent at teaching and supporting its students with the lowest prior attainment, enabling them to achieve a degree class beyond their original expectations, but the provider would still gain a low value-added score, if that outcome was a lower-second or below. Providers that award a higher-than-average proportion of 'good honours' are still likely to outperform those with stricter marking criteria in this metric.

The table below identifies how value-added scores are used by each compiler.

Data source	HESA student record
Usage	**Guardian**: Each full-time student is given a probability of achieving a first or upper-second-class degree, based on their entry qualifications. If they achieve a first or upper-second-class degree they score points which reflect the difficulty of doing so. This is used in both the main and subject tables. **The Times** & **Sunday Times:** Not used. **Complete University Guide:** Not used.

Graduate careers

Gaining entry to a graduate-level or professional career is one of the primary outcomes that students hope to achieve from their time within higher education. The annual Destinations of Leavers from Higher Education (DLHE) survey, which takes place six months after course completion, is the source of data for this metric. Responses to the survey from employed graduates are coded using the Standard Occupational Classification developed by the Office for National Statistics. This allows employment to be classified as graduate level (professional) or non-graduate level (non-professional).

There has long been debate within the sector about the optimum timing for the collection of data on graduate careers and six months after graduation is seen by many as too early.[14] At this stage, graduates may have chosen to undertake employment that gives them valuable work experience, or which is a stepping stone to the role they are actually seeking. But the longer the delay after graduation, the greater the challenge of maintaining up-to-date contact details for former students. A recent review of the DLHE survey concluded that these data could be collected in better ways, so the 2017/18 DLHE survey will be the last time the current methodology is employed. The new Graduate Outcomes survey will collect data after 15 months, so the timing of the survey will be important to note when reviewing the results.[15]

The other point to note is the frequency with which the Standard Occupational Classification is updated by the Office for National Statistics to reflect economic and social changes. Reviews take place every 10 years, so trends in employer

requirements and recruitment patterns can take some time to feed through. Occupations that are now regarded as professions, and for which a degree is seen as an essential prerequisite, have not always been so – take nursing, for example, which became a graduate profession in 2013.[16] This means that providers which offer qualifications in newly-emerging professions can see their graduates gaining employment within their targeted occupation, but still perform relatively poorly in this metric.

The table below identifies how graduate careers data are used by compilers.

Data and source	Destinations of Leavers from Higher Education (DLHE) survey data – an annual survey, which takes place six months after course completion.
Usage	All three compilers use the proportion of leavers who take up graduate-level employment, or higher education-level further study, within six months of graduation.
	Different weightings are applied by different compilers, but this metric is used in both main and subject tables by all compilers.

Research quality / intensity

The sector-level assessment of research quality, which is conducted periodically through the Research Excellence Framework (REF), results in a range of qualitative and quantitative outputs. To gain a full understanding of the research expertise within a given provider, both types of output are important. But only the statistics lend themselves to use within league tables, so rankings inevitably show a partial picture.

To use the REF results, compilers need to map the subject groupings (known as Units of Assessment) that are used within each REF (Units of Assessment tend to vary for each exercise) to their own subject groupings. This is done in conjunction with providers but, because there is rarely a perfect fit, it can result in some surprising outcomes. For example, a provider may not submit to the Law Unit of Assessment in the REF but may submit staff from its Law Department to other Units of Assessment as part of an interdisciplinary approach. Because Law staff did take part, the outcomes from the Unit(s) of Assessment they entered can legitimately be mapped to the Law subject table. So a provider which did not submit to a particular Unit of Assessment can appear to be more successful in research in that subject area than a provider which did participate.

In addition, while the REF is the best source of data on research quality, it is an infrequent exercise, taking place approximately every six to seven years. Data for these metrics, therefore, may become increasingly disconnected from the current reality, as time passes.

The table below identifies how research quality / intensity data are used by compilers.

Data and source	Results of the Research Excellence Framework (REF) 2014 and HESA staff record.
Usage	***Guardian:*** Not used. ***The Times*** & ***Sunday Times:*** In both main and subject tables, this is shown as a combined metric. Work rated 4* in the REF is weighted by a factor of three, 3* by a factor of one and research rated 2* and 1* does not score. Academic staffing data (from HESA) are used to estimate the number of eligible staff in each provider to factor in depth of research quality. ***Complete University Guide:*** In both main and subject tables, this is shown as two metrics: i) Research quality: Points are allocated to each star grading (1-4) achieved within a Unit of Assessment (subject area). This allows a grade point average to be calculated, which is then weighted by the number of staff submitted. ii) Research intensity: The number of staff submitted to the REF is divided by the number who were eligible for submission to show the proportion of the institution's research staff submitted.

Spend per student

When examining expenditure, the same data are used by different compilers to create either one overarching or two separate metrics. Calculations are made at either subject level or centrally, with results being averaged over two or three years. These different approaches can lead to very different rankings for the same provider. For example, for these metrics in the 2018 tables the University of Central Lancashire was ranked 53rd in the *Guardian*, 82nd in *The Times* & *Sunday Times* and 48th (academic services spend) and 94th (facilities spend) in the *Complete University Guide*.

Whichever method is used, interpretation of the rankings is not straightforward: high spending-levels might be evidence of strong investment in learning and teaching, but they do not, of themselves, give any indication of value for money, nor the lasting impact on the student experience. High spend and low student satisfaction might suggest a perception of low value amongst students, but comments from some final-year students completing the National Student Survey state that some of their low scores for their provider were due to their frustration at disruption caused by improvements which they knew they would not benefit from. This was undoubtedly frustrating for these students, but the new facilities would be a positive draw for those considering future study with that provider.

The table below identifies how expenditure data are used by compilers.

Data and source	HESA student and finance records
Usage	**Guardian:** In both main and subject tables, academic expenditure through cost centres (without staff salaries) is divided by the number of students in each cost centre. Added to this figure is the amount of money the institution has spent on academic services over the past two years, divided by the total number of students enrolled at the provider in those years. **The Times** & **Sunday Times:** In the main table only, expenditure on academic services and staff and student facilities is averaged over two years (to even out expenditure on big projects) and divided by the total number of students across both years. **Complete University Guide:** This is shown as two metrics in the main table only: i) Academic services spend: A provider's expenditure on library and computing facilities (books, journals, staff, computer hardware and software, but not buildings), museums, galleries and observatories is divided by the number of full-time equivalent students. ii) Facilities spend: A provider's expenditure on student facilities (sports, careers services, health, counselling and similar) is divided by the number of full-time equivalent students. For both metrics, expenditure over three years is averaged to allow for uneven expenditure.

Overall scores

A variety of methods are used to create overall total scores for each provider. Most compilers use statistical tools such as 'z scores', which allow different types of figures to be aggregated together and results to be ranked using information from all of them. This overcomes the problem of scores for different metrics

A Guide to UK League Tables in Higher Education

being in different formats – for example, some are percentages, some are ratios and others are sums of money. It also allows compilers to deal with negative scores. As noted above, in the case of the *Guardian*, the provider-level ranking table is built up from subject tables, while *The Times* & *Sunday Times* and the *Complete University Guide* calculate their overall tables as a separate exercise. Total points awarded can, therefore, look quite different from publication to publication and only make sense within the context of the original rankings.

Conclusions

A range of different factors affect how league table rankings should be interpreted and used. League tables are not created for higher education providers to use as core management information. They are not based on thorough in-depth analyses of the datasets and they do not take many of the known contextual factors into account – for example, graduate employment data are not adjusted for local employment markets, despite differences in the profile of employment opportunities across the country.

Yet league tables bring together a range of different sources of information about higher education providers to give a general overview of factors that prospective students might find useful when considering where to study. They provide information at both subject and institutional levels and they generate media coverage, putting areas of supposedly stronger and weaker provision in the spotlight.

League tables are also helpful to other stakeholders. Policymakers might find league tables useful in giving a sense of the diversity of provision and providers might find them useful for their insight into how people see their institutions from outside. League tables are here to stay, and it would be ill-advised to ignore them. However, using them as the sole basis for policymaking or strategic decision-making is equally ill-advised. There is a wealth of additional data that can supplement and add context.

In this respect, we recommend that:

- **Prospective students** continue to visit as many higher education providers as possible to inform their opinions about institutions and recognise that league tables are just one tool among many that they can use to help them create a shortlist of institutions.

- **Policymakers** continue to engage in conversations with relevant sector bodies and a range of providers to give significant additional insights to help make strategic decisions.

- **Higher education providers** avoid chasing a higher league table position at the expense of a broader strategic consideration of emerging trends, as an institution's unique position in the sector should not be underestimated and cannot always be effectively conveyed by a league table.

Links to rankings

- The *Complete University Guide*:
  http://www.thecompleteuniversityguide.co.uk/

- *The Times* & *Sunday Times Good University Guide*:
  http://www.thetimes.co.uk/tto/public/gug/ (NB: pay wall)

- The *Guardian University Guide*:
  https://www.theguardian.com/education/universityguide

- People & Planet University League Table:
  https://peopleandplanet.org/university-league

- *THE* World University Rankings:
  https://www.timeshighereducation.com/world-university-rankings

- QS World University Rankings:
  https://www.topuniversities.com/university-rankings

- Academic Ranking of World Universities:
  http://www.shanghairanking.com/

- CWTS Leiden Ranking:
  http://www.leidenranking.com/

- U-Multirank:
  http://www.umultirank.org/#!/home?trackType=home

Endnotes

1 *International university rankings: For good or ill?*, Bahram Bekhradnia, HEPI Report 89, 15 December 2016: http://www.hepi.ac.uk/2016/12/15/3734/

2 A slight exception to this is the National Student Survey data, which is used by *The Times* & *Sunday Times* very soon after its release in August – this ranking is published in September. However, students completing the survey are encouraged to reflect on their whole course experience, so some of the key events influencing this feedback may well have taken place in earlier years.

3 Register of Higher Education Providers, http://www.hefce.ac.uk/reg/register/

4 From 2019, JACS will be replaced by the Higher Education Classification of Subjects (HECoS)

5 JACS is hierarchical in the sense that there are three layers of subject groupings, which increase in detail. At the top layer (subject area) there are 19 broad groupings (such as medicine and dentistry; languages; and historical and philosophical studies). At the second layer (principal subject), there are 165 more detailed subject groupings (such as clinical medicine; Italian studies; and philosophy). At the third, most granular level (detailed subject), there are over 1,500 subjects. See https://www.hesa.ac.uk/support/documentation/jacs for full details.

6 This has been tested in a number of commercially-sensitive studies by providers.

7 This point is presented in more detail in *International university rankings: For good or ill?*, HEPI Report 89, as mentioned above.

8 Annual Provider Review is the core mechanism used by HEFCE to assess quality in the higher education providers it funds. See http://www.hefce.ac.uk/pubs/Year/2016/201629/ for more details.

9   For more information about the National Student Survey, see http://www.thestudentsurvey.com/about.php

10 It should be noted that the UCAS tariff system changed in September 2017 and the number of points awarded to specific qualifications is now significantly different. See https://www.ucas.com/ucas/undergraduate/getting-started/entry-requirements/ucas-undergraduate-tariff-points for details.

11 See http://www.hefce.ac.uk/pubs/rereports/year/2014/nssreview/

12 See https://www.hesa.ac.uk/files/DDS-resource_SSR-survey-report.docx for details.

13 See https://www.hesa.ac.uk/pis/outcomes for full details.

14 See for example, *Tackling Wicked Issues: Prestige and Employment Outcomes in the Teaching Excellent Framework,* Paul Blackmore, Richard Blackwell and Martin Edmondson, HEPI Occasional Paper 14, 8 September 2016: http://www.hepi.ac.uk/wp-content/uploads/2016/09/Hepi_TTWI-Web.pdf

15 See https://www.hesa.ac.uk/innovation/outcomes for more details.

16 See http://webarchive.nationalarchives.gov.uk/+/http://www.dh.gov.uk/en/MediaCentre/Pressreleasesarchive/DH_108359.

This HEPI report looks under the bonnet of the three main UK league tables – *The Times* & *Sunday Times* Good University Guide, the *Guardian* University Guide and the *Complete University Guide*.

Intended as a reference tool for governors, managers and policymakers, it reveals how the wealth of data is used by the league tables compilers.

It also highlights some limitations of league tables in the hope that greater awareness will lead to more effective and appropriate use.