QAA Briefing

Helping providers get the most from their data

October 2018

Background

Data provides great opportunities to the higher education sector, enabling providers to be more responsive to students' needs, to allocate resources more efficiently and plan better. But to make the most of this opportunity, we need good data - and the best way to get good data is to start treating it as an asset.

Data is one of the most valuable assets an organisation holds but it is rarely recognised as such. We need to protect it and treat it with the same care we show towards other assets, like money. We keep money in banks so why don't we keep data in secure databases with defined definitions for terms and validation criteria so, for instance, dates are all displayed the same way? Security doesn't mean inaccessible data; money in a bank is very accessible in a user-friendly way through online banking and apps. It is equally possible for organisations to achieve this with data. If the data is kept in a secure, well-managed database, it can feed into accessible dashboards for all staff in real time (people tend to understand data more easily if it is presented visually).

Data capability?

A key part of treating data as an asset is getting serious about data capability. Data capability is about improving people's ability to understand, use and manipulate data, and giving them the right tools to do this. The tools don't need to be flashy or expensive but the data must be accurate. A commonly expressed rule with data is 'rubbish in, rubbish out' - if the data isn't accurate then the conclusions drawn from it may not be true, and any analysis unreliable.

Accurate shouldn't be confused with perfect. In the real world very little is perfect, but it can be accurate. When data is accurate it is well managed and well defined. This means storing it in such a way that it can be trusted, easy to find and when analysed or compared, one version of the truth is used.

### How does this link to higher education quality?

Data is now integral to every aspect of higher education operation (from key performance indicators to building security swipes). So, data capability should at the forefront of institutional strategies as the rewards to be gained from even simple data capability improvements will not only help providers achieve key objectives, but also drive organisational development.

The Higher Education Data and Information Improvement Programme (HEDIIP) data capability toolkit evaluates where many organisations (including QAA) are within a data capability maturity model and where they could be. The model has five levels: chaotic,

reactive, stable, proactive and predictive. Most organisations are in the low reactive level but have the potential to be in the high stable to low proactive levels. The HEDIIP work found that in most sector organisations, there is a lack of good data capability in many departments (both professional services and academic). However, there are pockets of expertise, often located in specialist planning and data teams, that could readily help upskill other members of staff, including senior managers.

Data capability is important for lots of reasons. There are regulatory requirements, such as the new General Data Protection Regulation (GDPR), which carries potentially massive fines from the Information Commissioner's Office if organisations do not comply with it. However, striving to improve data capability shouldn't be driven by regulatory requirements. There are real benefits to be gained from getting data capability right.

Impacts of poor data capability can be hard to identify and quantify especially when the data errors occur at the point of entry. This is demonstrated in the example below where an incorrect student postcode is entered into a provider's system.
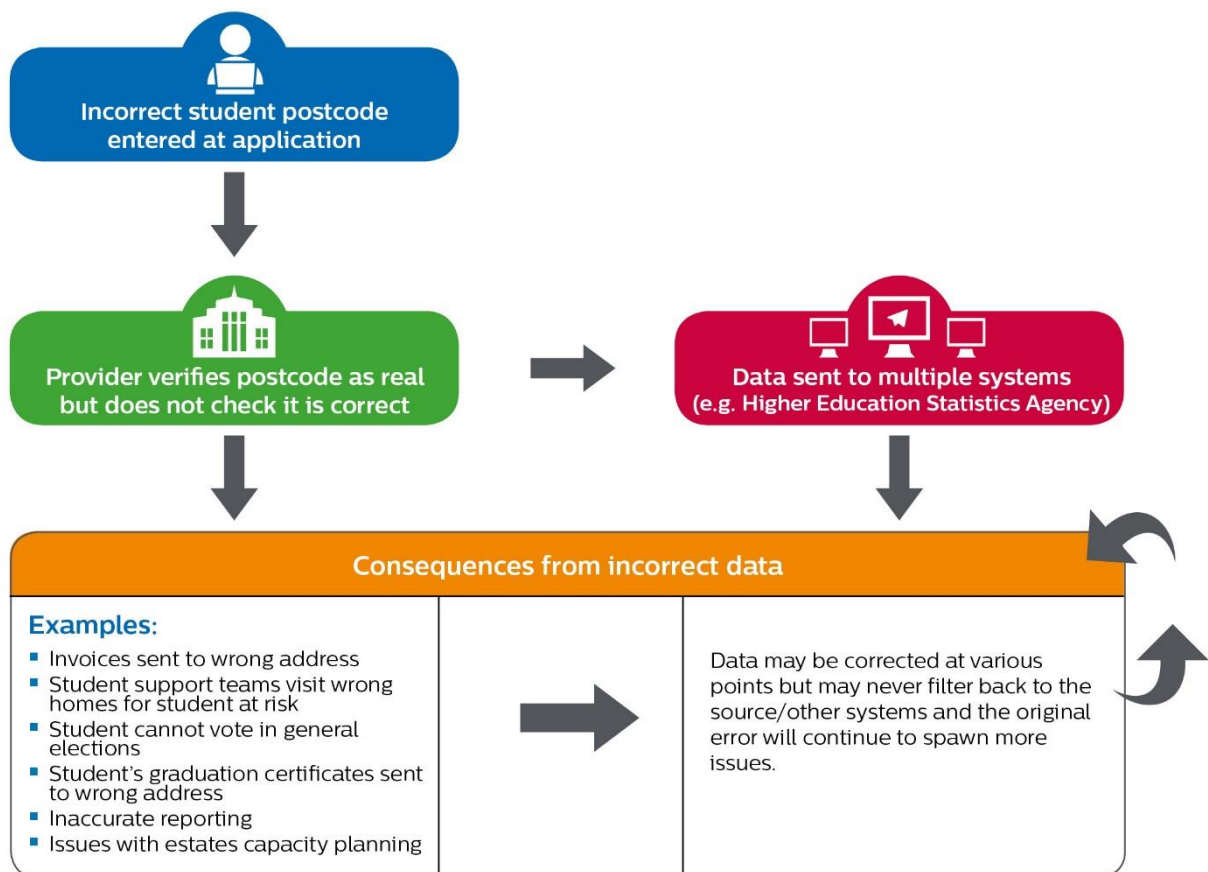
Obviously, the consequences of entering incorrect data wouldn't occur simultaneously and, in isolation, wouldn't have a big impact or high-associated cost, making it hard to justify spending time improving processes or investing in a new system. However, if the cost of these impacts are combined with the cost of the data cleansing that is required, the total cost of failure would be hundreds of thousands of pounds every year - more than enough to justify buying a new system and training staff to improve the data capability of the organisation by checking that the postcodes are accurate, as well as real, at the point of entry.

How can the sector build its data capability?

It is not only examples of bad practice that providers can learn from. Through QAA reviews and our Liaison Programme, many areas of good practice have been identified relating to data capability that have been shared for the benefit of the wider sector. These are available as part of our Good Practice Case Study Programme and Review Findings Directory (formerly the Knowledgebase). In spring 2018, QAA put out a specific call for case studies on using data for internal quality and assurance purposes, which will be shared with the sector. The current Enhancement Theme in Scotland is Evidence for Enhancement: Improving the Student Experience, with outputs relevant for providers in all UK nations. QAA has also responded to sector needs identified through our Liaison Programme and worked with our M5 partners to deliver relevant events such as Data Matters.

Case study: Effective use of data

Norland College

Norland College has been a provider of early years education since 1892, becoming a higher education institution over the past ten years. Norland treats data as an asset and has a strong commitment to improving data capability. As a small specialist provider with a single degree programme, the big student record database packages like SITS did not offer a practical option. Instead, the College sought out data management software that fitted its bespoke needs rather than using a less secure solution like Excel.

Since securing its data management and embarking on a training plan to promote data capability and improve its use internally, Norland has realised many benefits. These include being able to better understand and contextualise its data, which was used to great effect in its 2018 TEF submission, and resulted in an upgrade of its final award from Silver to Gold. Norland also aligns its first and second-year student surveys to the National Student Survey to allow better comparability of data and allow any issues to be addressed in a more timely manner.

Both QAA and the Office for Students (OfS) has recognised Norland for its use of data. In a 2017 Higher Education Review, QAA identified the College's analysis of data and feedback from students, alumni and employers as an example of enhancement. The OfS audit in 2018 was assured of the systems, protocols and accuracy used to complete the 2016-17 Higher Education Statistics Agency student data return.

Improving data capability can achieve great benefits for your organisation and have a real impact on your students' experience. However, improving data capability isn't easy, straightforward or quick; the HEDIIP data capability programme estimates that it takes at least 18 to 24 months to move up a data capability maturity model level, once improvement work has begun. This is a long process with many challenges, but it is important to persevere. Treating data as an asset and improving your data capability is a commitment that needs to be driven from the top down, and it has to be consistent and ongoing. The most successful organisations in this area are those that have done exactly this. They have dramatically improved their data capability and been able to use the insights gained from their accurate and consistent data to improve the experience they offer their students, improve their teaching and research and climb up the rankings as a result.