Higher Education Data Collection

2020 Reporting Requirements

July 2019

Executive Summary

The University of Melbourne welcomes the opportunity to provide feedback on the Department of Education and Training's *Draft Higher Education Data Collection – 2020 Reporting Requirements*.

Student data is critically important in the operation of Australia's higher education system. It plays an important role in driving improvement in the system, as the data collected provides Government, higher education providers, and other stakeholders with a view of the sector's performance, of student pathways and sector trends. The Department is to be commended for seeking to make the data collection more efficient through the 'Transforming the Collection of Student Information' (TCSI) initiative, and for the consultative approach it has taken to this process. The University has benefited in particular from the detailed presentations and communications provided by the Department earlier in 2019.

While the proposed changes set out in the new reporting requirements are broadly positive, the University has concerns with some of these changes. These concerns relate to three key areas: the insufficient time allowed for the implementation of the new requirements; issues with some of the new data requirements; and insufficient detail provided on some areas.

Timing: Due to the considerable delays in the release of the *Draft Reporting Requirements*, it is not possible for higher education providers to meet all the new compliance requirements, and there will be gaps in the student data for the 2020 reporting year.

Data requirements: A number of the data requirements specified in the *Draft Reporting Requirements* are likely to cause problems. These include:
- the proposed requirements for the verification of student addresses.
- the proposed requirements for matching information between a provider's Student Management System and TCSI.
- the proposed arrangements for recording 'summer and winter school' units.
- the proposed arrangements for validating student data prior to submission.

Insufficient detail provided: Additional information is needed on the due dates for half-year, full-year and staff data, and on the expected release of the portal templates.

We would welcome the opportunity to further engage with the Department on improvements in the data collection process.

For further information, or to discuss this submission, please contact Dr Julie Wells, Vice-Principal (Strategy and Culture) at Julie.wells@unimelb.edu.au or (03) 8344 2639.

Recommendations

Timing

The University of Melbourne recommends that the Department of Education and Training recognise that due to significant delays in the release of the of the Draft Reporting Requirements, higher education providers will not be able to meet all compliance requirements, resulting in some gaps in the data for the 2020 reporting year.

Data requirements

The University of Melbourne recommends that the Department of Education and Training:

- Not proceed with applying address verification in TCSI, due to the difficulties associated with this.

- Enact changes to the API design – using key data elements as identifiers as is the case with the provider portal – to allow for a more stable, robust and manageable process, avoiding potential problems with synchronising SMS and TCSI data.

- Move element 'E551: Summer and winter school code' from the 'Unit of study' packet to the 'Unit enrolment' packet to avoid the problems with the current proposals.

- Allow providers to validate data prior to submission, allowing for errors to be identified and correct prior to the data being formally submitted.

Insufficient detail

The University of Melbourne recommends that the Department of Education and Training provide detail on the due dates for half-year, full-year and staff data, and advising of the expected timing of the release of portal templates, to allow providers to implement the shift to the new system.

Key issues

Timing

The new reporting requirements and associated documentation have been released later than was initially advised. Unfortunately, this will mean that system vendors are unable to complete the Student Management System (SMS) updates in a timely way. Providers will thus incur additional cost as vendors are not able to provide SMS updates by required timelines to meet compliance requirements. Importantly, given the timing of university admissions, data for the 2020 academic year has already been collected from some student cohorts. This will inevitably result in gaps in the student data for that year

Further, while both providers and vendors have prioritised analysis of the requirements to inform this response, the delays in finalising the Ministerial Notice have left little time to fully analyse the new requirements ahead of the deadline for responding. The University of Melbourne's Infrastructure Services team is still analysing the detail of the reporting requirements. Issues additional to those identified below may still be found.

Recommendation

The University of Melbourne recommends that the Department of Education and Training recognise that due to significant delays in the release of the of the Draft Reporting Requirements, higher education providers will not be able to meet all compliance requirements, resulting in some gaps in the data for the 2020 reporting year.

Data requirements

Address verification

The University understands that student addresses are to be validated under the new arrangements, and that addresses that fail to validate will cause records in the corresponding packet to fail. There are potential difficulties with the applying address validation in TCSI:

- Some valid Australian addresses nonetheless fail verification as they are not recognised by a given validation system. This includes some Roadside Mailbox (RMB) addresses, and addresses in multi-unit residential buildings that do not conform to the Australia Post format.

- Enforcing address validation in our systems has in the past had perverse outcomes. For example, some students whose address is not recognised – and who are therefore prevented from completing their enrolment – set their address country to 'Australian Antarctic Territories' as a way of bypassing validation. Hence, while our systems guide students towards validation, there are ways of avoiding it. While these students are in a clear minority, a small percentage of affected students have the potential to cause many errors that cannot be resolved easily if address verification is applied in TCSI.

Given these issues, it is appropriate that the Department not attempt to apply address validation in TCSI in its initial implementation.

Unique identifiers

The current design of the Application Programming Interface (API) requires that a provider's Student Management System (SMS) store information mirroring what is recorded in the TCSI system. For example, the University of Melbourne's SMS will be required to:

- identify which entities have already been sent to TCSI and require updating, and which are still to be created.

- record a Universal Identifier (UID) to allow updates to the data including additional data elements.

This design is likely to be unstable. Data stored in provider SMSs can easily become out of sync with that stored in TCSI, with no established process through the API that allows the system to reset or re-synchronise. Consequently, while the proposed approach simplifies the system design for the government, it will create a long-term cost for all providers and system vendors. Specifically, providers and vendors will need to undertake extensive data correction and manipulation at a series of points, including:

- in the initial migration from the HEIMS to TCSI

- in cases where the 'portal' is used to upload data instead of the API

- in future SMS transitions between vendor solutions. (Note that the amount of data that would need to be carried between systems under the proposed requirements is significant.)

- in cases where the linkage to TCSI data is broken due to a record in the SMS being replaced by another.

- in cases of incorrect information caused by software defects.

Through our system vendor 'TechnologyOne', the University has engaged with the Department to highlight these problems. We believe the API design could be changed by using key data elements as identifiers as is the case with the provider portal. This would provide for a more stable, robust and manageable process in which these scenarios would not cause errors or failure.

These changes would also reduce the cost of implementing TCSI. This point about costs is important as the issues outlined above are specific to the API: these issues do not arise in the current arrangements when submitting data via the 'Portal'. Hence, under the arrangements proposed in the *Draft Reporting Requirements*, providers will effectively be penalised for implementing the API with a higher 'cost of ownership' of the solution.

Element 551: Summer and winter school code

Data identifying summer and winter school units is proposed for collection in the new 'Unit of study' packet. This impacts subjects that are delivered across multiple study periods. The workaround for this issue is for providers to duplicate subject codes to meet subject delivery requirements. This will mean that students will 'see' the same subject on the system with different codes to differentiate between study period offerings. This will have a negative impact on students by creating unnecessary confusion, and will add complexity to the management of curriculum data.

Validation of student data prior to submission

The University of Melbourne supports the development of a validation API as requested by the co-design group. However, it is important that the validation process be appropriately designed to avoid potential problems. Under the current arrangements, universities can make an initial submission via HEPCAT which identifies fatal errors, allowing for these to be corrected ahead of the final submission. This is an efficient validation process that should be maintained to minimise administrative effort and to avoid the costs associated with otherwise unnecessary software releases.

Recommendations

The University of Melbourne recommends that the Department of Education and Training:

- *Not proceed with applying address verification in TCSI, due to the difficulties associated with this.*

- *Enact changes to the API design – using key data elements as identifiers as is the case with the provider portal – to allow for a more stable, robust and manageable process, avoiding potential problems with synchronising SMS and TCSI data.*

- *Move element 'E551: Summer and winter school code' from the 'Unit of study' packet to the 'Unit enrolment' packet to avoid the problems with the current proposals.*
- *Allow providers to validate data prior to submission, allowing for errors to be identified and correct prior to the data being formally submitted.*

Insufficient detail provided

Further detail is required for the University to properly implement the shift to the new system. The *Draft Reporting Requirements* refer to verification for half-year, full-year and staff data, but do not provide a due date for each. Also, providers need to be advised of when portal templates will be released so that they can prepare for this.

Recommendation

The University of Melbourne recommends that the Department of Education and Training provide detail on the due dates for half-year, full-year and staff data, and advising of the expected timing of the release of portal templates, to allow providers to implement the shift to the new system.