Australian Government

Department of Education, Skills and Employment

VET Data Streamlining Discovery 1

Summary Report

Contents

Foreword

The Department and Where*to* Research would like to thank the people and businesses who volunteered their time to be involved in this research.

Background

The VET Data Streamlining (VDS) Program was established by the Department of Education, Skills and Employment (the Department), in collaboration with state and territory governments and the National Centre for Vocational Education Research (NCVER), to address the need for improvements in the collection and use of VET activity data.

VET Data Streamlining will modernise the way VET activity data is reported to governments and includes a VET Information Standard. The VET Information Standard will replace the current data standard – Australian Vocational Education and Training Management Information Statistical Standard [AVETMISS] version 8 and will enable training providers to submit data to a central repository in near real-time, system to system through an Application Programming Interface (API).

Methodology

The Department Education Skills and Employment (DESE) commissioned [Where*to* Research](Whereto Research) (Where*To*) undertake VET Data Streamlining discovery research. Where*to* conducted 48 interviews and 9 workshops with training providers and student management system vendors during November and December of 2021. This summary report was created by the department from that research. For more information, please view appendix 1.

Purpose

The Department sought to build a better understanding of the current diversity of the VET sector and the different approaches that training providers use to manage student and training activity data collection, validation, and submission. In addition, the Department was looking for early feedback on a proposed VET Information Standard and Student and Training Activity Reporting System (STARS). The feedback is being used to:

- better map the diversity and landscape of the VET sector's reporting processes
- understand current challenges of VET data reporting for training providers
- identify potential early challenges to adoption and implementation of the VET Information Standard and STARS
- identify potential benefits
- understand the roles and relationships between training provider and student management system vendors
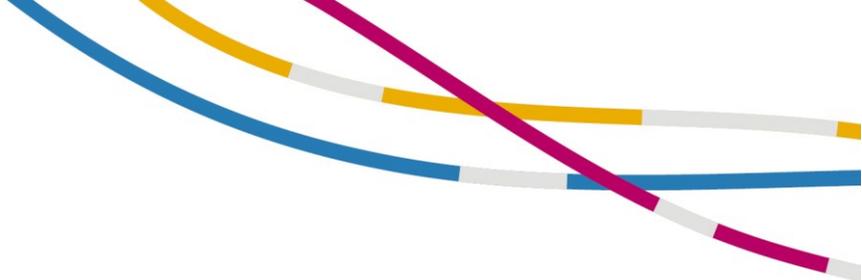
Current experience of training providers

Training provider context

Discussions with training providers suggested three contextual themes that help explain their response to VET Data Streamlining, these are:

Change fatigue

Training providers are experiencing change fatigue. Providers are not seeking further change given COVID-19, alterations to training packages and, for some, the introduction of Tertiary Collection of Student Information (TCSI).

Attitudes to VET activity data reporting

Training providers are focused on delivering training, supporting students, and running sustainable businesses. Because of this focus, VET activity data management is not considered the core business of most training providers. This attitude is reflected in varying degrees of focus on data quality.

In addition, training providers typically have a co-operative and compliance motivated posture. Providers told us they will comply with their VET activity data reporting obligations where they can. In addition, they expressed a willingness to be involved where possible in the development of VET Data Streamlining.

Diversity in training provider business processes

The research revealed significant diversity in training provider business processes. Whilst there are broad commonalities in approach, each provider described operations tailored to best meet the needs of their staff, students, training environment and cost model.

VET activity data management

Training providers described the following VET activity data management activities:

- Data collection and entry

- Initial adjustments following collection and entry

- Reporting; including extraction, initial validation, submission and addressing errors.

Data collection and entry

Training providers typically use mixed data collection and entry modes, and a variety of systems to store and report data. These include:

- Different data collection modes, including telephone, digital and paper forms.

- Multiple system data entry and re-entry points, including student management systems, learning management systems, financial management systems and other databases.

- A range of people undertaking data entry, including students, trainers, assessors, and administrative staff. A proportion of training providers already have some digitised data collection methods.

Others cite practical barriers to digitising, these include:

- Dispersed training activity locations

- Business complexity

- Not being able to afford enabling technologies

- Unreliable access to the internet

- Lack of student literacy

- Lack of student access to devices.

Challenges of data reporting:

Training providers raised the following issues:

- Variable data quality and consistency resulting from human error

- Reduced efficiencies associated with offsite data collection

- Barriers to student enrolment resulting from government requirements

- Administrative burden where similar data elements need to be collected in multiple ways to meet government requirements.

Initial data adjustments

The discovery research provided insight into adjustments that are required to be made to data due to:

- Students not being able to provide information, or providing erroneous information
- A need to contact the USI Registry System or government funders to resolve conflicts between information supplied by students and that held by government
- Adjusting student records to reflect students changing their enrolment

Challenges:

Training providers raised issues with administrative burden:

- from contacting students to correct their personal information.
- resulting in delays from resolving differences between information provided by students and that already held by government.
- from having to update records when students change their enrolment

Reporting

Training providers submit data to governments as often as once a fortnight, and as infrequently as quarterly or yearly. More frequent submission is associated with government funding, and less frequent submission with fee for service training providers. Training providers' estimates for the time required for each submission event ranged from a few hours to 2 months. Extracting data into relevant file formats and cleaning and validating data was described as the most onerous aspects of reporting.

Data quality

Training providers described several factors that support submission of quality data to government:

- staff with VET activity data expertise and experience
- staff dedicated to VET activity data management
- student management systems that control what data is entered
- cleaning on data entry
- additional validation of their data before submitting this to government.

In contrast, slow feedback loops for data submitted to government can delay training provider access to information on how to improve the quality of their VET activity data.

Challenges:

Training providers raised these issues regarding administrative burdens and barriers:

- lack of clarity on how governments define data elements
- government reporting requirements that do not reflect the realities of training provider business processes
- transforming data for multiple government funders
- funding issues from not being able to resolve error messages
- error messages that are not clear about what the issue is, or which record that the issue is attached to reduced data quality from delays in governments providing feedback to training providers.

VET Data Streamlining changes and transition

Response to the proposed VET Data Streamlining changes

Two changes were identified to address current issues with VET data reporting, these are system to system reporting and a consolidated data standard. Near real time reporting and the additional data elements were seen to be potentially more challenging.

System-to-system reporting is accepted as being in line with contemporary technology. Student management system vendors stated they can accommodate this change. Providers that undertake their own development or do not report through a student management system will be more affected, because they do not have the advantage of having a student management system vendor managing the transition on their behalf.

A consolidated data standard will mean training providers that report to multiple jurisdictions will no longer need to transform their data into multiple different reports to meet the needs of those different jurisdictions.

Near real-time reporting is believed to be more disruptive for training providers and student management system vendors who identified numerous challenges, such as the impact on resourcing. Training providers are accustomed to periodic reporting and reported that needing to have a human resource available on a near daily basis might complicate rostering and have cost implications. Where data is cleaned monthly, quarterly, or yearly, it can be easier to dedicate a resource to the task. Providers are seeking more information about how this change will be applied in practice.

At the time of research (late 2021) the impact of **new fee and student progress data elements** being added to the information standard is unclear. Some training providers believe these will be relatively easy to accommodate and others do not. Student management system vendors need further information to judge whether this will require significant changes to their system architecture. Broadly, the limited information on these elements available at the time of research meant discovery participants found it difficult to comment.

Transition to VET Data Streamlining

Training providers have four key motivations for engaging with VET Data Streamlining, they are:

- Reduced regulatory burden
- Maintaining government funding
- Regulatory force
- Providers' ability to accommodate regulatory change.

Some training providers have significant practical barriers to change, in addition to the impact on rostering and allocation of resources for near real-time reporting. Training providers are concerned they might need to re-input fee data to meet the VET Information Standard. Providers with exemptions currently have a once-a-year, reduced reporting requirement and are unsure how they will be treated under VET Data Streamlining.

Broadly training providers are concerned that they might not be able to adapt to changes quickly or effectively. As a result, they may submit poor quality data, not report at all, experience delayed access to government funding.

Benefits for training providers

The discovery research suggests that VET Data Streamlining may:

- Reduce the effort required to meet different government reporting requirements through managing data transformation within VET Data Streamlining
- Remove the need to collect similar data items in multiple ways through governments aligning the way they define data elements
- Remove the need to collect as many data elements as possible through governments agreeing on a minimum data standard
- Provide more clarity on how data elements are defined
- Improve the clarity of error messages
- Provide more clarity on which student management system vendors are the most compliant to governments data requirements.
- Provide more streamlined access to USI Registry System and training.gov.au information
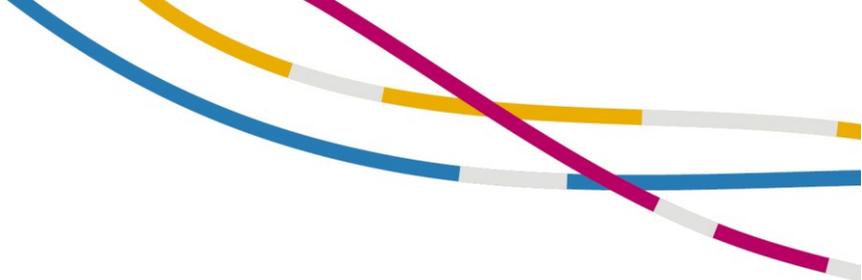
- Provide more timely feedback on data quality issues identified by governments
- Support providers to become more efficient and effective in addressing data quality issues because reporting is done more frequently
- Support Government funding better matching what the market is doing (avoiding unintended consequences for providers)
- Give training providers better access to market data and visibility of their data held by governments
- Encourage training providers to automate and integrate VET activity data management.

Conclusion

The changes proposed as part of VET Data Streamlining have the potential to address key issues for funded training providers and student management system vendors in meeting government reporting requirements. However, the transition to VET Data Streamlining may be difficult for some training providers and student management system vendors and could come at a cost.

Training providers and student management system vendors require more detail on both the VET Information Standard and the new Student and Training Activity Reporting System (STARS) to fully understand the changes required.

Appendix 1. Detailed Methodology

Project requirement

The Department commissioned Where*to* to undertake discovery research to understand how implementation of VET Data Streamlining might affect VET training providers and student management system vendors, including:

- Mapping the current environment: products offered, current reporting approaches, existing data availability and quality, current issues/pain points and opportunities for training activity reporting

- Assessing the impact of changes to the data standard and new technology, including to business process, staffing, technology, costs

- Exploring cost versus benefit metrics: current versus future state

- Exploring training provider and student management system vendor ability to meet proposed development timeframes: change readiness and achievability of the timeframes

- Exploring actions and support that would assist training providers and student management system vendors to transition.

Project methodology

At the project outset, a stakeholder mapping process was undertaken in conjunction with VDS partners which included the New South Wales, South Australian and the Northern Territory training authorities as well as the National Centre for Vocational Education Research (NCVER) to identify student management system vendors, VET training providers and peak bodies who might benefit from being involved in the discovery project and would provide relevant insights into the sector. The Australian Capital Territory partnered later during the research period and some providers from that jurisdiction where also contacted. The Contact details were provided to Where*to* who scheduled and undertook fieldwork. Fieldwork was observed by VET Data Streamlining partners. The fieldwork was conducted in November and December 2021. It comprised:

- 48 x 60–120-minute interviews conducted via telephone or video conference, with:
  - 2 VET training provider peak bodies.
  - 8 student management system vendors (including 2 interviews with vendors that together represent approximately half the training provider market).
  - 37 training providers (5 TAFEs, 13 private, 6 community, 8 enterprise provider, 3 dual sector, 2 VET in school, including fee for service/partial fee for service and exempted reporting, with 2 providers having an in-house student management system and 1 provider reporting to NCVER via a data portal).
- 5 x data workshops where student management system vendors and training providers were also invited to attend information and question and answer sessions with NCVER.
- 4 x delivery workshops where student management system vendors agreed to invite their training provider clients to attend a briefing and question and answer session with the Department's
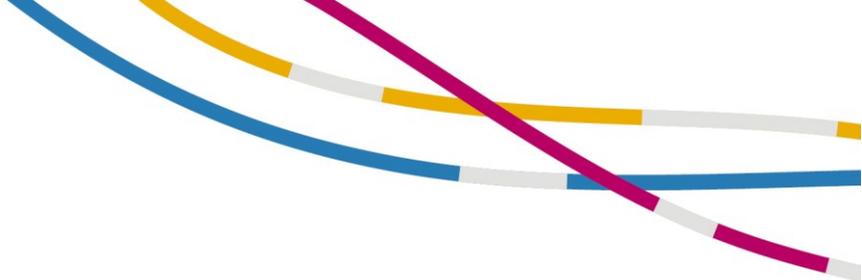
Appendix 2. Glossary

API – Application Programming Interface

AVETMISS – Australian Vocational Education and Training Management Information Statistical Standard

COVID-19 – Coronavirus disease

NCVER – National Centre for Vocational Education Research

STARS – Student and Training Activity Reporting System

TAFE – Technical and Further Education

TCSI – Transforming the Collection of Student Information

The Department – The Department of Education, Skills and Employment

USI – Unique Student Identifier

VET – Vocational education and training