Transforming the Collection of Student Information (TCSI)

Roadshow

June 2018
The Department of Education & Training (DET) and the Department of Human Services (DHS) are working with providers to transform the collection of student information.
TCSI - our Aim

• Use new technologies to simplify how data is collected
• Reduce duplication
• Improve data quality, timeliness and availability
Roadshow outline

• New data structures
• Understanding your data flows
• Proposed solution – the details
• Timelines for reporting & using data
• Elements to support DHS student payments
• Implementation schedule
• Open discussion and questions
HEPCAT pain points

• Duplicated reporting:
  – Files (EN, HELP Due)
• Confusing validation error messages
• Two step validation process
• Validation errors reject whole files (not failed records)
• Slow to run validations
• Need to maintain custom validations
HEPCAT pain points

- Complex, inflexible file structures
- Only supported on Windows 7
- Doesn’t support flexible work arrangements
- Changes are costly to build into student management systems
- HEPCAT is difficult to learn
What TCSI will offer providers

RESOLVED
PAIN POINTS

LESS CONFUSING &
MORE DIRECT

TIME SAVING &
MORE TIMELY
Benefits of the TCSI Project

For students it will:

• Make DHS student claims simpler
• Improve payment accuracy
• Help maintain their student payment to complete their studies
Benefits to students

Greg’s Story
Greg’s story

Greg enrolls in 3 subjects at Red University.
He works part time at a café but still needs some support.

Greg applies for and receives support from DHS.
Greg’s story

DHS

Greg?

Gregory

red

Call

Bank Card
Greg Smith

red

Call
Greg’s Story: Semester 1

Greg drops a subject

(but forgets to update DHS)
Greg’s story: Semester 2
How iGreg's story: Semester 2: Semester 1

DHS

Greg?

Red

$DEBT

Bank Card:
Greg Smith

Call

Call
How it could have been: Semester 1
Benefits to students

Fewer students will have debts to DHS

Students with debts will owe less

Students are more likely to remain in their course & increase their employability
The discussion papers - what you told us

We received feedback from
- over 60 Higher Education stakeholders
- 23 VET stakeholders
Summary

Key themes:

• A new approach to reporting must:
  ✓ support timely & cost effective implementation of change
  ✓ include a seamless, one-step validation

• Collected data must be subject to essential validation checks before it is accessed by users

• There must be realistic timeframes for implementation
Single touch reporting

• More detail is required - what does single touch reporting look like and what does it mean for:
  – timing of reporting e.g. when is data due?
  – when data is used?
• Ongoing consultation for any changes is critical
• Data quality must be a priority
• Changes will have cost implications
Identifying Students

• Strong support for expanding the Unique Student Identifier (USI) to all higher education students

• Key concerns:
  – timeframes for implementation
  – understanding and managing privacy impacts on students
  – addressing duplication – as highlighted by existing issues around CHESSNs and TFN matching

• Opportunities for centralised maintenance of key identifying data (VET & HE)
Reducing duplication

• Strong support in HE to decommission CART
  – Sufficient lead-time essential to analyse and implement design and administrative changes
  – Privacy impacts on students need to be understood and appropriately managed

• Maintaining student phone numbers
  – HE: these are difficult & time-consuming to maintain & of limited value
  – VET: strong support

• Opportunities to further rationalise government data collections
Relevance

• Strong support for reducing duplication between submissions – more opportunities may be clearer when single-touch reporting is defined
  – Support for removal of most proposed elements
  – HE: except parental education & course completions
• Other elements suggested for removal
  – e.g. commencing location for school leavers
• Support for collecting Work Integrated Learning data but issues to work through – work currently underway needs to be considered
• VET: strong support for closer alignment with AVETMISS
Low quality data

- Universal calls for clearer coding notes, validations & business rules & more transparency around data use
- Lots of ideas on elements to review:
  - Highest educational participation, basis of admission
  - VET: course load
- Support to:
  - Review credit arrangements, course naming conventions
  - HE: Review campus data, recognising dependencies with admissions requirements
- Removing ‘no information’ codes:
  - No support in HE
  - Strong support in VET
- Support to rationalize data collections - PRISMS, AVETMISS
Tailoring the VSL collection

• Strong support for the introduction of new elements:
  – Enrolment date
  – Unit of study start dates, end dates and completion dates
• Consider replacing units of study with units of competency
• No support to introduce elements for:
  – Study intention, Student engagement, Academic suitability
  – Fee periods
  – New student status codes to differentiate between VET FEE-HELP and VSL
Reducing duplication – rethinking our data framework

Provider → Courses of study/courses → Units of study → Entitlements

Student
Data framework – Student

- **Student**
  - True for a student
  - Won’t be different because of a student’s course or units of study

- **Student in a course**
  - True for a student in a course
  - Can be different because of a student’s courses
    - BUT
    - Won’t be different because of units of study

- **Student in a unit of study**
  - True for a student in a unit of study
  - Can be different because of a student’s units of study
Data structures
User experience

Students → Online? paper form?

Provider

- Tools
- Systems
- Processes?

HEPCAT
Proposed high level data flow

DATA CHECKING
• Real time, single step validation
• TFN verification
  – good records accepted, errors returned

Data for student payments

SMS
[System to system data transfer]

or

Portal
[file/form upload]

HEIMS
HELP debt transfer to ATO after census date

HEIMS Online
• Data view
• standard reports

Student Entitlement checks

Australian Government
Department of Human Services

centrelink
Solution Design – Authentication

B2G Interface

Provider Portal
For each event, Government defines both:
- the minimum elements in a data packet (for submission)
- a full packet (required to enter HEIMS/transfer debts to ATO)
The flow in B2G

- **Government Interface**
  - Fields & business rules are checked on all data in the packet
- **DATA STORE**
  - A subset of validated data will support student payments
  - A single error message is returned
- **TFN Lookup**
- **Mismatches reported**
- **AUSTRALIAN TAX OFFICE**
  - Data passes to HEIMS when complete
  - Debts/remissions transferred to ATO
- **HEIMS (Legacy)**
  - A subset of validated data will support student payments
- **HUMAN SERVICES**
The flow out of B2G

User Interface

PROVIDER'S SMS

SMS receives clear, actionable error reports for any packets that are not accepted

SMS can access a view of partial packets that have not met the requirements for a full packet

Government Interface

SMS is able to access all data stored by govt. including data:
  • correct for a point in time
  • reported at a point in time
The flow into the Provider Portal

Data is received or entered by education providers

$ Upfront entitlement checks

Provider's SMS, database or spreadsheet

Submission officer compiles a file

Submission officer authentication & authorisation

Officer uploads file

Officer submits

Log date/time, transaction type & submission officer

Officer can check fields and business rules without submitting

Officer can view/download clear, actionable error reports for any packets that are not accepted

Officer can view/download all data that has been accepted

Government Interface
The flow behind Portal

**Australian Tax Office**
- TFN Lookup
- Data passes to HEIMS when complete
- Debts/remissions transferred to ATO

**Human Services**
- A subset of validated data will support student payments

**HEIMS (Legacy)**
- Mismatches reported
- Error messages are kept until the file is processed
- A single error file is returned

**Government Interface**
- Fields & business rules are checked on all data in the packet

**Data Store**
How is the B2G Interface looking for you?
Managing changes in data:

Revisions and updates

You told us there are three things that might need to happen to different records:

1. Revising things that can only have one correct value (e.g. DOB, TFN)
2. Values that change and we need to know previous & new data (e.g. addresses, gender)
3. Values that we need effective dates for when they change (e.g. citizenship)
1. Revising – no history required

- **October 2020**
  - Mark enrolls and gives his date of birth
  - **DOB 1**
  - **DOB 2**

- **November 2021**
  - Mark tells his provider his date of birth is wrong

- **2021**
  - Provider sends the enrolment info with the date of birth

- **2022**
  - Provider sends the correct date of birth with the record identifiers
    - It applies from the original date
2. Revising – we need to know previous & new data

October 2020
Beth enrols but didn’t know her term address

March 2021
Beth tells her provider her term address which is on campus

March 2022
Beth updates her term address to her share house

Provider sends enrolment info with term address blank

Provider sends the term address with record identifiers

Provider sends new term address with record identifiers

Provider sends correct address with the record identifiers (incl. submission date)

Provider notices a typo in the term address
3. Revising – we need to know effective dates

- **October 2020** Maria enrols as an international undergrad student
- **June 2021** Maria gets a permanent visa
- **August 2021** Maria signs up for more units of study
- **Later in August 2021** Maria tells her provider she got her visa in June
- **May 2022** Maria becomes an Aussie citizen
- **October 2022** Maria tells her provider about her Aussie citizenship

- **Provider sends units of study with “temp entry permit” (4)**
- **Provider sends the units of study without CSP**
- **Provider has to find the units that are affected by the change**

**358 Citizen/resident indicator**

<table>
<thead>
<tr>
<th>1</th>
<th>Australian citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Permanent visa</td>
</tr>
<tr>
<td>4</td>
<td>Temporary entry permit</td>
</tr>
</tbody>
</table>
3. Revising – we need to know effective dates

- **October 2020**: Maria enrolls as an international undergrad student
- **June 2021**: Maria gets a permanent visa
- **August 2021**: Maria signs up for more units of study
- **Later in August 2021**: Maria tells her provider she got her visa in June
- **May 2022**: Maria becomes an Aussie citizen
- **October 2022**: Maria tells her provider about her Aussie citizenship

**Validations can highlight all the units that need to be checked**

**Provider sends updated fee information for units that are incorrect**

**358 Citizen/resident indicator**
- 1 Australian citizen
- 3 Permanent visa
- 4 Temporary entry permit
How is the B2G Interface looking for you?

1  B2G Interface

2  B2G Interface

3  Portal
Tell us your thoughts on the solution?

• What delights you?
• What concerns you?
• What opportunities can you see in the solution?
• What barriers might there be to adopting the solution?
Reporting timelines
Event based reporting

ENROL IN COURSE ➔ ENROL IN UNITS ➔ FEES/HELP ➔ OUTCOME

A STUDENT’S RECORD

[Diagram showing the process with arrows and icons]
<table>
<thead>
<tr>
<th>Before validation</th>
<th>Before census date</th>
<th>n days after census date</th>
<th>After verification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EDUCATION &amp; TRAINING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data is used to check a student’s HELP entitlement limits upfront</td>
<td></td>
<td>Data is used to transfer HELP debts to the ATO</td>
<td>Data is compiled into reports for publication</td>
</tr>
<tr>
<td>Students can view their data</td>
<td></td>
<td>Data is used to calculate payments for VSL providers</td>
<td>Data is used to reconcile payments for higher education providers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AUSTRALIAN TAX OFFICE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data is used to verify TFNs (like the current TFN Lookup file)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Data are used to record HELP debts against students’ accounts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HUMAN SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A subset of validated data is used to understand eligibility for payments</td>
<td></td>
</tr>
</tbody>
</table>
Elements to support DHS student payments
Elements to support DHS student payments

New elements

- Unit of Study Commencement Date
- Unit of Study Outcome Date
- Standard Course Duration
- Unit of study Year Long Indicator

Updates to existing elements

- Course of Study Commencement Date (534)
- Student Course Outcome
- Unit of Study Outcome (355)
Implementation

TIME TO PLAN!
High level schedule

Co-design work on data requirements and design

31 July 2018 – 30 June 2019
Collaborative work with IT pilot partners to develop, iteratively test and validate the solution

End July
Release V 0.1 B2G specifications - HE

End Sept
Release V 1.0 B2G specs - includes VET

Full solution

End 2019
High Level Implementation Timeframe

30 June
Element/data groups finalised
Version 0.1

Draft specifications for a “first look”

31 July - August
Version 0.1\* B2G
Draft of all data specifications available for providers and their software vendors

September
Version 1.0\* B2G
Updated draft of specifications to include VSL data

Agile development – iterative govt. build and test of versions with pilot partners

* B2G specifications are living documents, versions are updated, as required, in response to sector feedback during agile development

June 30 2019
Final of all APIs delivery by DET/DHS

2018 | 2019

March/April 2019
Software vendors deliver to clients

2019 | 2020

Oct 2019
Providers implement production software for 2020 Student data

Jan 2020
Reporting of 2020 course & Student data as events occur

* B2G specifications are living documents, versions are updated, as required, in response to sector feedback during agile development
What does agile development look like?

Work should be delivered based on what gives the most value, soonest.

OS-HELP
Domestic student overseas
Staff
Applications and offers
SA-HELP
Reference Data
Course
Campus
Student in a unit of study
Student
Commonwealth Scholarships
Student in a course
Questions?

Is there anything you need from us?
HEIMS Data Collections

HEIMSHELP – TCSI Resources page

HEIMS.datacollections@education.gov.au

Telephone: (02) 6240 7487