

Te Amorangi Mātauranga Matua



TEO Published Information for Learners

Published by the Tertiary Education Commission

Te Amorangi Mātauranga Matua

National Office 44 The Terrace PO Box 27048 Wellington, New Zealand

16 February 2018

Authors

The Tertiary Education Commission

Every effort is made to provide accurate and factual content. The TEC, however, cannot accept responsibility for any inadvertent errors or omissions that may occur.



This work is licensed under the Creative Commons Attribution 4.0 International licence. You are free to copy, distribute, and adapt the work, as long as you attribute the work to the Tertiary Education Commission and abide by the other licence terms. Please note you may not use any departmental or governmental emblem, logo, or coat of arms in any way that infringes any provision of the Flags, Emblems, and Names Protection Act 1981.

Table of Contents

1		Purpose of this guide	5
2		About the Key Information for Students (KIS)	5
3		The KIS Data Service design	5
	3.1	Overview	5
	3.2	Environments	6
4		Connecting to the KIS Data Service	8
	4.1	Choose a connection method	8
	4.2	Set up your connection method	8
	4.3	Need help?	9
5		KIS Data Service connection set-up instructions	. 10
	5.1	Dynamic connection method	10
	5.1.1	How to connect to the KIS Data Service	10
	5.1.2	Copy and adapt the TEC's example code (where highlighted)	10
	5.1.3	Frequently Asked Questions	11
	5.2	Cached connection method	12
	5.2.1	How to connect to the KIS Data Service	12
	5.2.2	TEC example code	12
	5.2.3	Frequently Asked Questions	12
	5.3	Asynchronous connection method	13
	5.3.1	Connect to the KIS Data Service	13
	5.3.2	TEC example code	14
	5.3.3	Frequently asked questions	14
6		About OData	. 15
	6.1	OData URLs	15
	6.2	Other URLs	15
	6.3	Production URLs	16
	6.4	Sandbox URLs	17
7		String and number representations for the KIS	. 18
8		Data calculations and timeframes for updates	. 20

Tables

Table 1: Description of the KIS Data Aggregation Service Production components	7
	,
Table 2: Choosing the right connection method	8
Figures	
Figure 2: KIS Data Aggregation Service Production environment	6
Figure 3: Server configuration showing load balancing for the KIS Production environment	7

1 Purpose of this guide

The Tertiary Education Commission has developed a KIS Data Service to enable tertiary education organisations (TEOs) easy access to the up-to-date Key Information for Students (KIS) data so it can be displayed on the qualification pages on your websites.

This guide tells you how you connect to the KIS Data Service, your data connection for your website. The document is written for the technical staff that will connect your website to the KIS Data Service. The assumption is you have already designed the KIS for your qualification pages and are ready to retrieve the data from the KIS Data Service.

This guide covers:

- > an overview of the KIS Data Service and the environments available to you
- > the methods available to connect to the KIS Data Service
- > the steps needed to develop and implement the connection method (and example code)
- > string and number representations for the KIS data
- > frequently asked questions (FAQs).

2 About the Key Information for Students (KIS)

The Key Information for Students is a set of information learners can view on your website to help them make more informed tertiary education decisions on what and where to study.

The KIS is displayed on the qualification pages of your website and is made up of two sections with the following data:

- information available at a TEO qualification level ie, *Entry Requirements, Duration, Tuition Fees, Student Success*
- information available at a national level for young graduates ie, Earnings, In employment, In further study

3 The KIS Data Service design

3.1 Overview

The TEC has developed the KIS Data Service to aggregate all the data required for the Key Information for Students. The KIS Data Service retrieves this data to save TEOs having to manually input or resubmit data already collected.

KIS data is calculated from core data held within the TEC's Data Warehouse and made available for use through the KIS Data Service. After the data is collated it is moved into the Information for Learners database. The information is then visible to the public through your website.

The KIS Data Service uses OData protocol which allows you to query the KIS Data Service and retrieve the data for the KIS using the URL. The KIS data is presented as a complete package ie, all fields for a qualification will be returned as an aggregated set and not individually, and will be refreshed on a daily basis. The refreshed data will be available to you every day. The fields returned are described in the *String and number representations for the KIS* table.

The data will also be hosted on a central website where you can search for your qualifications and check the most up-to-date KIS data has made it to your website. Refer to *Data calculations and timeframes for updates* section.

The data aggregation service infrastructure is set up as a highly available service, load balanced and replicated across multiple servers to distribute the workload evenly and eliminate any single points of failure. Any required maintenance will be carried out independently on each set of servers meaning that scheduled maintenance outages will not be needed for the KIS Data Service.

3.2 Environments

There are two KIS environments available:

- 1. Sandbox connect to this from your test environment.
 - This test environment is an exact replica of the Production environment. It allows you to test your connection and to connect your test environment to. It is not available to the public. You will need to provide your IP address and request access.
- 2. Production connect to this from your live site (see
- 3. Figure)

This environment is an OData service that connects to the TEC Data Warehouse to provide live data. It has been set up to allow you to connect your live environment to display the KIS on your qualification pages. This production environment is load balanced and replicated.

KIS Production Environment

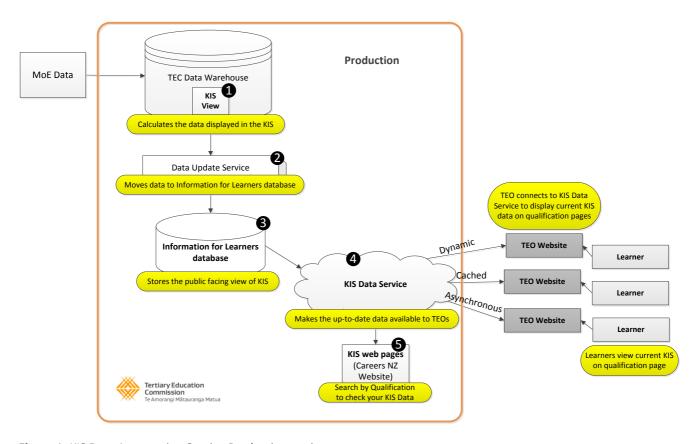


Figure 1: KIS Data Aggregation Service Production environment

 Table 1: Description of the KIS Data Aggregation Service Production components

Component	Description		
0	The KIS View in the TEC Data Warehouse retrieves data from source tables, collates and performs calculations, and makes the results available to the Data Update Service.		
KIS View			
2	The Data Update Service retrieves data from the KIS View within the TEC Data Warehouse, converts data as necessary for display and stores the resulting information		
Data Update Service	in the Information for Learners database.		
•	The Information for Learners database stores publically available information needed for the Key Information for Students and previous versions of that information.		
Information for Learners database			
•	The KIS Data Service makes the data in the Information for Learners database available to TEOs, other organisations and members of the public.		
KIS Data Service	to 1203, other organisations and members of the public.		
6	Web pages on the central website allow TEOs (and those TEOs that do not have qualification pages to connect to) and public users to view the KIS for each qualification.		
KIS web pages	quanification pages to conflect to and public users to view the KIS for each qualification.		

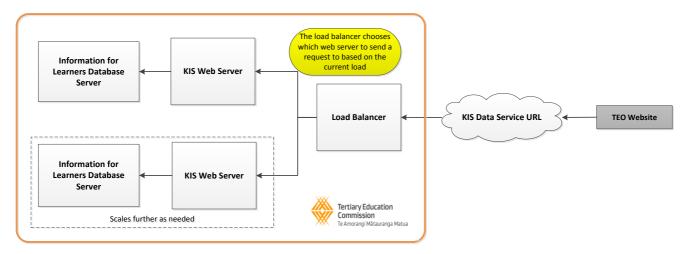


Figure 2: Server configuration showing load balancing for the KIS Production environment

4 Connecting to the KIS Data Service

4.1 Choose a connection method

There are three methods for connecting to the KIS Data Service and updating the Key Information for Students on your qualification pages – **Dynamic, Cached** and **Asynchronous**. You should choose the most relevant method dependent on the type of website you have (*Table*).

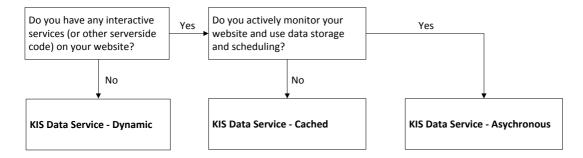


Figure 1: Decision steps for choosing your connection method

Table 2: Choosing the right connection method

Connection Method	Description	Who is it for?	Be aware
KIS Data Service - Dynamic	The KIS data on a TEO's website is refreshed each time a learner visits the qualification page.	Easy to code for TEOs with websites that only display information. Learners always see the most upto-date information available.	There may be a slight delay in displaying the data for learners. Less suitable for websites with a large number of qualification pages.
KIS Data Service - Caching	The KIS data on the TEO's website is saved after initial download and refreshed at regular intervals determined by their website.	For TEOs that have interactive website capability eg, enrolments, qualification searches, ask a question.	More involved coding required for implementation. Learners may not see the most up-to-date information.
KIS Data Service - Asynchronous	The TEO schedules when KIS data is refreshed on their website using their scheduling capability.	Maximum control for TEOs that want to pull data at specific times. TEOs can store data off the website for historical analysis.	Relatively complex coding required for implementation. Not suitable for TEOs that do not proactively monitor their websites.

4.2 Set up your connection method

Follow the instructions to set up your preferred connection method to the KIS Data Service.

- Dynamic KIS Data Service
- Cached KIS Data Service
- Asynchronous KIS Data Service

Important: Don't forget to add in the 'Detailed requirements',' Compulsory Student Services Fee' and 'StudyLink' links as these are not provided by the KIS Data Service (see page 25 Data calculations and timeframes for updates).

While there are a number of ways to connect to an OData service with strongly typed objects eg, by generating a proxy, it is suggested that you instead use a more dynamic connection method that allows you to retrieve just the fields you need. The example code shows one way to do this. Connecting in this way helps ensure that any future additional Key Information for Students fields do not adversely affect your site.

4.3 Need help?

Call the TEC Sector Helpdesk on 0800 601 301 (9.00am to 5.00pm Mon to Fri) or email CustomerService@tec.govt.nz

5 KIS Data Service connection set-up instructions

5.1 Dynamic connection method

5.1.1 How to connect to the KIS Data Service

There are two options for connecting to the KIS Data Service using the *dynamic* connection method:

- 1. Copy and adapt the TEC's example code below (the code can be downloaded from our website as a text file); or
- 2. Write your own code using either the TEC dynamic or cached code as an example (refer to the *String and Number Representations t*able for the field names to use). If you use the TEC code as an example, the *Dynamic* section shows a client-side example and the *Cached* section shows a server-side example.

5.1.2 Copy and adapt the TEC's example code (where highlighted)

- 1. Download the code here
- 2. Add 'id' attributes to HTML tags in your design where you want KIS data to appear.
- 3. Copy and paste the JavaScript code from the example code in the TXT file to your qualification page.
- 4. Update the URL in the code:
 - a. to connect to Production use http://info4learners.tec.govt.nz/
 - b. to connect to the Sandbox for testing purposes use http://i4l-uat.tec.govt.nz/
- 5. Update the EDUMIS number and qualification code in the url.
- 6. Update the id's in the JavaScript.

```
1 Add 'id' attributes to HTML tags in your design where you want the KIS dataset to appear
```

Or use:

NB: You need an id for each of the KIS fields, and one to display a message if the data cannot be retrieved. Our code uses the following ids but you can use different names if you prefer:

- minimumEntryRequirements
- duration
- governmentSubsidy
- studentFees
- annualStudentFees
- annualGovernmentTuitionSubsidy
- totalAnnual
- totalTotalQualification
- courseCompletion
- employment
- furtherStudy
- onBenefit
- earnings
- upperQuartileEarnings
- lowerQuartileEarnings
- errorMessage
- 2 Copy the code from the <u>file here</u>

```
Paste this JavaScript code to the bottom of your qualification page - after the </html> tag.
        Alternatively you can review and edit the code here - https://jsfiddle.net/tfanh6bg/
        Note: do not display the NZQAQualificationcode in your KIS.
3
        Update the EDUMIS number and qualification code in the URL to match yours
        $(document).ready(function() {
            UpdateKeyInformationData(6006 , 'NC0951');
4
        If you use different names for your ids, update the ids in the JavaScript code to match yours:
        $("#minimumEntryRequirements").text(keyInformationData. MinimumEntryRequirements);
        $("#duration").text(keyInformationData.Duration);
        $("#governmentSubsidy").text(keyInformationData.GovernmentSubsidy);
        $("#studentFees").text(keyInformationData.StudentFees);
        $("#annualStudentFees").text(keyInformationData.AnnualStudentFees);
        $("#annualGovernmentTuitionSubsidy").text(keyInformationData.AnnualGovernmentTuitionSub
        sidy);
        $("#totalAnnual").text(keyInformationData.Total Annual);
        $("#totalTotalQualification").text(keyInformationData.Total TotalQualification);
        $("#courseCompletion").text(keyInformationData.CourseCompletion);
        $("#employment").text(keyInformationData.GraduatesInEmployment);
        $("#furtherStudy").text(keyInformationData.GraduatesInStudy);
        $("#onBenefit").text(keyInformationData.GraduatesOnBenefit);
        $("#earnings").text(keyInformationData.MedianEarnings);
        $("#upperQuartileEarnings").text(keyInformationData.UpperQuartileEarnings);
        $("#lowerQuartileEarnings").text(keyInformationData.LowerQuartileEarnings);
        $("#<mark>errorMessage</mark>").text("Sorry, this information is not available right now. Please
        check back later.");
```

5.1.3 Frequently Asked Questions

Do I have to use .net as my website technology? No. You can use any technology in line with your existing website. Α Can I use the Dynamic connection method on server side instead of JavaScript? Yes. Look at the caching example for ideas on how to do this. Α If we are connecting dynamically and the KIS Data Service goes down, will it break our website? The example code provides an example of the basic code you need to call and retrieve the KIS data and an error Α message if the service is down. You will need to add specific code for your existing technology to ensure any such eventualities are covered, ie the rest of your website still displays and an error message is only shown in the KIS section. What should be displayed if the KIS Data Service is down? The example code displays 'Sorry, this information is not available right now. Please check back later.' if the Α service is down. Please make sure your code displays the appropriate error messages. Does the KIS Data Service provide everything required for the KIS presentation? Data for all data fields is retrieved from the KIS Data Service. Don't forget to add in the 'Detailed requirements', Α 'Compulsory Student Services Fee' and 'StudyLink' links as these are not provided by the KIS Data Service (see Data calculations and timeframes for updates).

5.2 Cached connection method

5.2.1 How to connect to the KIS Data Service

To connect to the KIS Data Service using the Cached connection method you will need to write code to:

- 1. Retrieve data from the KIS Data Service and display it on your website (using the code below as an example only).
- 2. Implement your choice of caching mechanism to cache the results of calls to the KIS Data Service (use the code below as an example only).

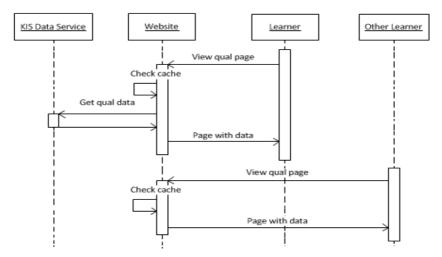


Figure 2 - shows the ideal sequence of events for a caching solution

5.2.2 TEC example code

Note: The example code shows one way to do this. It should only be used as a model of the steps to follow and **not just copied**, as the code will be dependent on the technology you use.

The example code was built in C# using ASP.NET MVC 4.5. While there are a number of ways to connect to an OData service with strongly typed objects eg, by generating a proxy, it is suggested that you use a more dynamic connection method that allows you to retrieve just the fields you need. Connecting in this way helps ensure that any future additional Key Information for Students fields do not adversely affect your site.

Remember to update the URL in the code to point to the correct OData service:

- a. to connect to Production use http://info4learners.tec.govt.nz/
- b. to connect to the Sandbox for testing purposes use http://i4l-uat.tec.govt.nz/

Example code

This example code allows you to retrieve data from the KIS Data Service and display it on your website and implement your choice of caching mechanism to cache the results of calls to the KIS Data Service.

You can download the code here.

5.2.3 Frequently Asked Questions

Q	How long can we cache the KIS for?
Α	24 hours
Q	Can I cache on the client side?
A	While this is technically possible we do not recommend it. This is only of benefit when the same learner accesses your site within the same day. Server-side caches provide benefits when multiple learners access your qualification pages within the same day.

Do I have to use .net as my website technology? Α No. You can use any technology in line with your existing website. We'd like to graph or show some numeric data visually on our website. Can we do this? Yes. All numeric KIS fields are available as NUMBER VALUES as well as formatted strings. Look at the String & Α Number Representations table for field names to use. If I am using a cached connection method, what happens if the KIS data for the qualification is not currently available from the KIS Data Service? If the current qualification data is already in the cache, the cached data will be displayed and an outage in the KIS Α Data Service will have no effect on your website. If there is no qualification data in the cache (or it has expired) and the KIS Data Service is not available then your website should display an appropriate error message. You will need to add specific code for your existing technology to ensure any such eventualities are covered, ie the rest of your website still displays and an error message is only shown in the KIS section. What should be displayed if the KIS Data Service is down? If the service is down, the example code (provided in this document) displays 'Sorry, this information is not available right now. Please check back later.' Please make sure your code displays the appropriate error messages. Does the KIS Data Service provide everything required for the KIS presentation? Q Data for all data fields is retrieved from the KIS Data Service. Don't forget to add in the 'Detailed requirements', Α 'Compulsory Student Services Fee' and 'StudyLink' links as these are not provided by the KIS Data Service (see <u>Data</u> calculations and timeframes for updates).

5.3 Asynchronous connection method

5.3.1 Connect to the KIS Data Service

To connect to the KIS Data Service using the Asynchronous connection method you will need to write code to:

- 1. Retrieve data from the KIS Data Service and store it in a location of your choice (use the code provided as an example only).
- 2. Implement a scheduling system of your choice to ensure the data is updated regularly.
- 3. Retrieve your stored data and display it on your website.

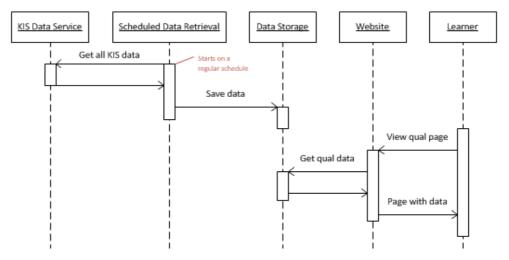


Figure 3 - shows the ideal sequence of events for an Asynchronous solution

5.3.2 TEC example code

Note: The example code shows one way to do this. It should only be used as a model of the steps to follow and not just copied as the code will be dependent on the technology you use.

The example code was built in C# using ASP.NET MVC 4.5. While there are a number of ways to connect to an OData service with strongly typed objects, eg by generating a proxy, it is suggested that you use a more dynamic connection method that allows you to retrieve just the fields you need. Connecting in this way helps ensure that any future additional Key Information for Students fields do not adversely affect your site.

Remember to update the URL in the code to point to the correct OData service:

- a. to connect to Production use http://info4learners.tec.govt.nz/
- b. to connect to the Sandbox for testing purposes use http://i4l-uat.tec.govt.nz/

Example code	Retrieve data from the TEC web service and store it in a location of your choice.
	You can find code to connect to the KIS Data Service asynchronously <u>here.</u>

5.3.3 Frequently asked questions

- Q Do I have to use .net as my website technology?
- A No. You can use any technology in line with your existing website.
- Q Do I have to store the KIS data in a database?
- A No. You can store it using any method you choose eg, file, SharePoint list etc.
- Q How often should I update the data?
- A The TEC updates will be available to you after 11pm each night for the previous day's updates, or Tuesday after 11pm for data updated weekly (see <u>Data calculations and timeframes for updates</u>).
- Q Can I retrieve fields on the KIS independently to others?
- A While this is technically possible, the KIS data comes as a package and you should always retrieve all data to ensure it is in sync.
- Q We'd like to graph or show some numeric data visually on our website. Can we do this?
- A Yes. All numeric KIS fields are available as NUMBER VALUES as well as formatted strings. Look at the <u>String & Number Representations</u> table for field names to use.
- Q If I am using an asynchronous connection method, what happens if the KIS data for the qualification is not currently available from the KIS Data Service?
- A Any outages in the KIS Data Service will have no effect on your website as all data will be retrieved from your local storage. If the KIS Data Service is unavailable when you attempt to retrieve updates your system should be configured to alert you and retry so that your data will be updated as soon as the KIS Data Service is available again.
- Q Does the KIS Data Service provide everything required for the KIS presentation?
- A Data for all data fields is retrieved from the KIS Data Service. Don't forget to add in the 'Detailed requirements', 'Compulsory Student Services Fee' and StudyLink links as these are not provided by the KIS Data Service (see <u>Data calculations and timeframes for updates</u>).

6 About OData

6.1 OData URLs

OData URLs are made up of two parts:

- the base service URL that tells the service what type of data you want to access eg http://i4l-uat.tec.govt.nz/KeyInformation
- 2. the query that tells the service which data you want to retrieve eg ?\$filter=ProviderCode eq '1234' and QualificationCode eq 'MYQUAL'

The service will run the query you send it and return just the results you are interested in. Results can be returned in JSON or XML format. By default, the service will use a format matching the headers your system sends but you can add &format=json or &format=xml to the end of the query to specify the format explicitly.

The environment URLs

- a. To connect to Production use http://info4learners.tec.govt.nz/
- b. To connect to the Sandbox for testing purposes use http://i4l-uat.tec.govt.nz/

For the purposes of displaying the Key Information for Students on your website, you will want to retrieve just the Key Information for Students data for a single qualification. You can do this with a URL such as the following (replace the highlighted sections with the URL for the appropriate environment as well as your own EDUMIS number and Qualification Code).

For Production:

```
http://info4learners.tec.govt.nz/KeyInformation?$filter=ProviderCode eq '1234' and QualificationCode eq 'MYQUAL'
```

For the Sandbox:

```
http://i41-uat.tec.govt.nz /KeyInformation?$filter=ProviderCode eq '1234' and
QualificationCode eq 'MYQUAL'
```

If you plan to access the data service asynchronously, you may wish to retrieve data for all your qualifications at once. This can be done with a URL such as the following (replace the highlighted section with your EDUMIS number).

For Production:

```
http://info4learners.tec.govt.nz/KeyInformation?$filter=ProviderCode eq '1234'
```

For the Sandbox:

```
http://i4l-uat.tec.govt.nz/KeyInformation?$filter=ProviderCode eq '1234'
```

You can find more detailed information about the capabilities of OData at https://www.odata.org/.

6.2 Other URLs

The following URL links to the central KIS website providing the KIS search and results pages as well as further information for learners about the Key Information for Students linked to from the bottom of the KIS (see KIS Implementation Plan for more information):

http://info4learners.education.govt.nz

Please do not confuse this URL with those for the OData Service:

http://info4learners.tec.govt.nz/ (Production environment)

http://i4l-uat.tec.govt.nz/ (Sandbox)

6.3 Production URLs

The following example queries can be run to access the Key Information for Students in the Production environment. All the URLs return data based on the KIS fields. You can create your own filters by adding to the base service URL:

http://info4learners.tec.govt.nz/KeyInformation?

For more information about conventions for OData queries and examples of use and semantics go to OData Version 4.0.

Example queries

Scenario	URL logic
All (active) qualifications for all providers	http://info4learners.tec.govt.nz/KeyInformation?\$orderby=QualificationName
All qualifications for provider 'Amet Risus Donec'	http://info4learners.tec.govt.nz/KeyInformation?\$filter=ProviderName eq 'Amet Risus Donec'
Government Subsidy = \$7,600	http://info4learners.tec.govt.nz/KeyInformation?\$filter=GovernmentSubsidy eq '\$7,600'
Top 10 Government Subsidies	http://info4learners.tec.govt.nz/KeyInformation?\$orderby=GovernmentSubsidy&\$top=10
Qualification name includes 'Certificate'	http://info4learners.tec.govt.nz/KeyInformation?\$filter=contains(QualificationName, 'Certificate') eq true
Duration is greater than 9 weeks	http://info4learners.tec.govt.nz/KeyInformation?\$filter=DurationInWeeksNumeric gt 9 or DurationInYearsNumeric gt 0
Duration is greater than 3 years	http://info4learners.tec.govt.nz/KeyInformation?\$filter=DurationInYearsNumeric gt 3
Minimum Entry Requirements contains 'augue'	http://info4learners.tec.govt.nz/KeyInformation?\$filter=contains(MinimumEntryRequirements, 'augue') eq true
Qualifications where Median earnings of graduates>\$35k AND Student Fees >\$270	http://info4learners.tec.govt.nz/KeyInformation?\$filter=MedianEarnings gt '\$35,000' and StudentFeesNumeric gt 270
Qualifications where earnings range of graduates is between \$37,500 and \$55,000 and ordered by lowest earnings first	http://info4learners.tec.govt.nz/KeyInformation?\$filter=LowerQuartileEarningsNumeric ge 37500 and UpperQuartileEarningsNumeric le 55000&\$orderby=LowerQuartileEarningsNumeric
All qualifications where the number of graduates on a benefit is greater than 10%	http://info4learners.tec.govt.nz/KeyInformation?\$filter=GraduatesOnBenefitNumeric gt 0.10
All qualifications ordered by qualification code	http://info4learners.tec.govt.nz/KeyInformation?\$orderby=QualificationCode
All qualifications ordered by provider code	http://info4learners.tec.govt.nz/KeyInformation?\$orderby=ProviderCode

6.4 Sandbox URLs

The following example queries can be run to access the Key Information for Students data in the Sandbox environment. All the URLs return data based on the KIS fields. You can create your own filters by adding to the base service URL:

http://i4l-uat.tec.govt.nz/KeyInformation?

For more information about conventions for OData queries and examples of use and semantics go to OData Version 4.0.

Example queries

Scenario	URL logic
All (active) qualifications for all providers	http://i4l-uat.tec.govt.nz/KeyInformation?\$orderby=QualificationName
All qualifications for provider 'Amet Risus	
Donec'	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=ProviderName eq 'Amet Risus Donec'
Government Subsidy = \$7,600	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=GovernmentSubsidy eq '\$7,600'
Top 10 Government Subsidies	http://i4l-uat.tec.govt.nz/KeyInformation?\$orderby=GovernmentSubsidy&\$top=10
Qualification name includes 'Certificate'	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=contains(QualificationName, 'Certificate') eq true
Duration is greater than 9 weeks	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=DurationInWeeksNumeric gt 9 or DurationInYearsNumeric gt 0
Duration is greater than 3 years	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=DurationInYearsNumeric gt 3
Minimum Entry Requirements contains 'augue'	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=contains(MinimumEntryRequirements,'augue') eq true
Qualifications where Median earnings of graduates>\$35k AND Student Fees >\$270	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=MedianEarnings gt '\$35,000' and StudentFeesNumeric gt 270
Qualifications where earnings range of	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=LowerQuartileEarningsNumeric ge 37500 and
graduates is between \$37,500 and \$55,000 and	UpperQuartileEarningsNumeric le 55000&\$orderby=LowerQuartileEarningsNumeric
ordered by lowest earnings first	
All qualifications where the number of	http://i4l-uat.tec.govt.nz/KeyInformation?\$filter=GraduatesOnBenefitNumeric gt 0.10
graduates on a benefit is greater than 10%	
All qualifications ordered by qualification code	http://i4l-uat.tec.govt.nz/KeyInformation?\$orderby=QualificationCode
All qualifications ordered by provider code	http://i4l-uat.tec.govt.nz/KeyInformation?\$orderby=ProviderCode

7 String and number representations for the KIS

The following table outlines the String and Number Representations for displaying the Key Information for Students on your qualification pages.

Important: Only use the Number Representation where the field information is being displayed as a graphical representation.

	KIS Heading	KIS Field Name	String Representation		Number Representation (if using graphics)	
			Field Name (KIS Data Service)	Example data	Field Name (KIS Data Service)	Example data
1a	Entry Requiremen ts	Minimum requirements	MinimumEntryRequirements Certificate in Computing or equivalent qualification		N/A	
1b		Detailed requirements	More information about entry to	this qualification link not in	ncluded in the KIS Data Service	
2a	Duration	Duration	Duration	26 weeks, OR 1 year	DurationInWeeksNumeric DurationInYearsNumeric	26 (null if in years) 1 (null if in weeks)
3a		Annual student fees	AnnualStudentFees	\$8,123	AnnualStudentFeesNumeric	8123
		Student fees	StudentFees	\$8,123	StudentFeesNumeric	8123
3b		Annual Government tuition subsidy	AnnualGovernmentTuitionSubsi dy	\$11,789	AnnualGovernmentTuitionSub sidyNumeric	11789
		Government tuition subsidy	GovernmentSubsidy	\$11,789	GovernmentSubsidyNumeric	11789
3c	Tuition Fees	Total (Annual)	Total_Annual	\$19,912	Total_AnnualNumeric	19912
		Total (Total Qualification)	Total_TotalQualification	\$19,912	Total_TotalQualificationNume ric	19912
3d		Compulsory Student Services Fee	link not included in the KIS Data S	ervice		
3e		Student loan information	StudyLink link not included in the KIS Data Service			
4	Student	Successful course completions	CourseCompletion	86%	CourseCompletionNumeric	0.8600

	KIS Heading	KIS Field Name	String Representation		Number Representation (if using graphics)	
	Success					
5a		Median earnings	MedianEarnings	\$42,650	MedianEarningsNumeric	42650
5b		Earnings range	LowerQuartileEarnings UpperQuartileEarnings	\$29,500 \$42,750	LowerQuartileEarningsNumeri c UpperQuartileEarningsNumeri c	29500 42750
	National					s range)
5a &b	Graduate Outcomes (3 years after completion)	Earnings (lower quartile, median, upper quartile)	LowerQuartileEarnings MedianEarnings UpperQuartileEarnings	\$29,500/\$42,650/\$4275 0	LowerQuartileEarningsNumeri c MedianEarningsNumeric UpperQuartileEarningsNumeri c	29500 42650 42750
5c		In employment	GraduatesInEmployment	58%	GraduatesInEmploymentNum eric	0.5800
5d		In further study	GraduatesInStudy	32%	GraduatesInStudyNumeric	0.3200
5e		On a benefit	GraduatesOnBenefit	2%	GraduatesOnBenefitNumeric	0.0200

8 Data calculations and timeframes for updates

The table below outlines the data sources and calculations for the KIS fields and the relevant time factors for data updates.

Rules

The following rules have been applied for the Key Information for Students aggregation and web data service:

- 1. Data is only included for active, funded qualifications.
- 2. Data is only included for qualifications at levels 5 and above.
- 3. All Course and Qualification Register data uses the latest values available. Updates to this data can be made on an ad hoc basis where necessary.
- 4. All course completion data uses the latest published EPI data.
- 5. All course enrolment data is taken from the December SDR as at the cut-off date for publication of the Educational Performance Indicators (EPIs). This means no resubmissions or changes to enrolment data will be reflected.
- 6. The KIS data only relates to domestic students.
- 7. Refreshed data will be available daily (*entry requirements, duration*) or weekly on a Tuesday (all other data) after TEC data processing has occurred. Subsequent data updates on your website will be dependent on your chosen connection method eg, *Dynamic* (immediate), *Cached* (within 24 hours) or *Asynchronous* (when your scheduled updates run).
- 8. Where data is unavailable or suppressed, the field will display the appropriate message in the KIS eg, 'N/A'

Heading	Field Name	Data source (field name)	Calculation	Data updates on KIS Data Service	Frequency
Entry Requirements	Minimum requirements	'brief entry requirements' TEO submitted data - Qualification Register	Not applicable	Ad hoc updates through Qualification Register	You will see the change in the KIS Data Service by 11.00pm the next night, as long as your change was made by 11.00pm on the previous night (see Rule 3 above)
	Detailed requirements (link)	TEO sets up link to More information about entry to this qualification elsewhere on the qualification page or TEO website.	Not applicable	Not applicable	Not applicable

Heading	Field Name	Data source (field name)	Calculation	Data updates on KIS Data Service	Frequency
Duration	Duration	'number of years' 'teaching/tuition weeks' 'vacation/recess weeks' TEO submitted data - Qualification Register	If the qualification duration in years is greater than 1, the KIS will display duration in years. Where the qualification is one year or less, the KIS will display either 1 year (if the EFTS value of the qualification is >=1 and the gross number of weeks is >=34) or the number of weeks (if the EFTS value is less than 1) — this will be gross weeks = tuition weeks + recess weeks.	Ad hoc updates through Qualification Register	You will see the change in the KIS Data Service by 11.00pm the next night, as long as your change was made by 11.00pm on the previous night (see Rule 3 above)
Tuition Fees	Student fees (Annual and Total Qualification)	TEC calculation using course tuition fee, compulsory course cost fees and EFTS value, and course enrolments from SDR submissions. TEO submitted data - Course Register, Qualification Register and Course Enrolment File	Annual Student fees divided by duration (in years) Otherwise, if duration in weeks then Annual student fees = Student fees (total qualification) Total Qualification average student fee per EFTS x EFTS value of the qualification	Ad hoc updates through Qualification/Course Register – EFTS value, course tuition fee, compulsory course cost fees. Course enrolments – December SDR	You will see the change in the KIS Data Service weekly by 11.00pm Tuesday night. (see Rule 7 above) December SDR (see Rule 5 above)

Heading	Field Name	Data source (field name)	Calculation	Data updates on KIS Data Service	Frequency
	Government tuition subsidy (Annual and Total Qualification)	TEC calculation using funding classification and course enrolments from SDR submissions. TEO submitted data - Course Enrolment File & Qualification Register	Annual Government tuition subsidy divided by duration (in years) Otherwise, if duration in weeks then Annual Government tuition subsidy = Government tuition subsidy (total qualification) Total Qualification Average \$ delivered per EFTS for courses associated with intended qualification x EFTS value of the qualification	Ad hoc updates through Qualification Register – EFTS value Course enrolments – December SDR	You will see the change in the KIS Data Service weekly by 11.00pm Tuesday night. (see Rule 7 above) December SDR (see Rule 5 above)
	Compulsory Student Services Fee (link)	TEO sets up link to the information about the compulsory student services fees (CSSF) on their website.	Not applicable	Not applicable	Not applicable
	Student loan information (link)	TEO sets up link to StudyLink hosted by MSD.	Not applicable	Not applicable	Not applicable
Student Success	Successful course completions	TEC calculation based on EPI methodology using course enrolments and completions from SDR submissions.	EFTS delivered for total no. of successfully completed course enrolments ending in year n (associated with intended qualification 'x')	Latest published EPI data	Last reporting year using final data for publication cut-off for that year (see Rule 4 above)
			EFTS delivered for total number of course enrolments ending in year n (associated with intended qualification 'x')		

Heading	Field Name	Data source (field name)	Calculation	Data updates on KIS Data Service	Frequency
National Graduate Outcomes (3 years after completion)	Median earnings	EOTE data - Integrated Data Infrastructure (IDI) data, Statistics New Zealand via MoE Qualification NZSCED - TEO submitted data in Qualification Register	EOTE data matched to qualifications based on qualification level and NZSCED.	EOTE – annually* NZSCED data - ad hoc updates through Qualification Register	When updated by MoE* You will see the change in the KIS Data Service by 11.00pm the next night, as long as your change was made by 11.00pm on the previous night (see Rule 3 above)
	Earnings range	EOTE lower and upper quartile data - Integrated Data Infrastructure (IDI) data, Statistics New Zealand via MoE Qualification NZSCED - TEO submitted data in Qualification Register	EOTE data matched to qualifications based on qualification level and NZSCED.	EOTE – annually* NZSCED data - ad hoc updates through Qualification Register	When updated by MoE* You will see the change in the KIS Data Service by 11.00pm the next night, as long as your change was made by 11.00pm on the previous night (see Rule 3 above)
	In employment	EOTE data - Integrated Data Infrastructure (IDI) data, Statistics New Zealand via MoE. Qualification NZSCED - TEO submitted data in Qualification Register	EOTE data matched to qualifications based on qualification level and NZSCED.	EOTE – annually* NZSCED data - ad hoc updates through Qualification Register	When updated by MoE* You will see the change in the KIS Data Service by 11.00pm the next night, as long as your change was made by 11.00pm on the previous night (see Rule 3 above)
	In further study	EOTE data - Integrated Data Infrastructure (IDI) data, Statistics New Zealand via MoE Qualification NZSCED - TEO submitted data in Qualification Register	EOTE data matched to qualifications based on qualification level and NZSCED.	EOTE – annually* NZSCED data - ad hoc updates through Qualification Register	When updated by MoE* You will see the change in the KIS Data Service by 11.00pm the next night, as long as your change was made by 11.00pm on the previous night

Heading	Field Name	Data source (field name)	Calculation	Data updates on KIS Data Service	Frequency	
					(see Rule 3 above)	
	On a benefit (optional)	EOTE data - Integrated Data Infrastructure (IDI) data, Statistics New Zealand via MoE Qualification NZSCED - TEO submitted data in Qualification Register	EOTE data matched to qualifications based on qualification level and NZSCED.	EOTE – annually* NZSCED data - ad hoc updates through Qualification Register	When updated by MoE* You will see the change in the KIS Data Service by 11.00pm the next night, as long as your change was made by 11.00pm on the previous night (see Rule 3 above)	
		* The TEC will update EOTE data as it becomes available from the Ministry of Education in a timely manner.				