

# Google SSO Intergration with KWL Digital

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# Google SSO Intergration with KWL Digital

## TABLE OF CONTENTS

1	Introduction .....	3
2	Types of Integrations.....	3
3	Google SSO Integration .....	4
3.1	Assumptions.....	4
3.2	Pre-requisites.....	4
3.3	Login Flow .....	4
4	KWL Digital In-House SSO .....	5
4.1	Assumptions.....	5
4.2	Pre-Requisites .....	5
4.3	Technical Setup .....	5
4.3.1	Building Auto-Signin URLs for KWL Digital.....	5
4.4	Login Flow .....	6



# Google SSO Intergration with KWL Digital

## 1 Introduction

This document is intended for use by resellers and schools that wish to integrate with the KWL Digital offerings – web and app versions via a Single Sign-in (SSO) flow so that school students & staff do not need to remember their individual passwords for accessing KWL Digital.

## 2 Types of Integrations

KWL Digital allows organisations to integrate with their own systems via two primary methods:

1. Google SSO: This method of integration is for organisations and resellers who are already using or plan to use the Google G Suite for Education platform for managing student accounts.
2. KWL Digital in-house SSO: This integration technique is for organisations that do not or cannot use the Google SSO technique above for SSO. This method is especially suited for resellers that have their own wrapper websites or apps that students sign-in into which then contains links to all the digital resources that the students have purchased from them. Upon clicking any of those links, the students need to be directly logged into the corresponding digital resource so they only need use the login to the reseller app or website.

The details of both these integration mechanisms are provided in this document.



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## 3 Google SSO Integration

This method of integration is for organisations and resellers who are already using or plan to use the Google G Suite for Education platform for managing student accounts.

### 3.1 Assumptions

This integration method assumes that the organisation is familiar with the G Suite and how it works, that they have already implemented G Suite in their organisations or have the technical expertise to do so.

### 3.2 Pre-requisites

While setting up accounts for the students with the KWL Digital platform, the organisation can indicate its choice to use Google SSO for logging in students instead of using the traditional username and passwords login flow. When organisations opt for Google SSO, they only need to provide the email addresses of the students along with their year level details but would *not* need to provide passwords for the students. KWL Digital will directly authenticate students via their Google accounts.

### 3.3 Login Flow

The login flow would be as below. Note that this flow would be exactly the same irrespective of whether the login is via the web version or app.

1. Student opens the KWL Digital start page or opens the app on the iPad
2. KWL Digital checks to see if this user is already signed into the Google domain – which would mostly be true for G Suite users
3. Next it checks if this user has previously authorised KWL Digital to get profile details<sup>1</sup> access from Google.
4. If the student has previously authorised KWL Digital, the system will directly log in the student without going to the login page first.
5. In case the student is not logged into Google OR if they haven't previously authorised KWL Digital, they would be taken to the login page where they would be presented with a button that says "Sign in with Google".
6. When the student presses the button a popover opens in the browser (or an in-app tab opens in the app) that asks the user to log into Google if they haven't already logged in and then presents a screen to the students that asks the user to give permissions to KWL Digital to access the user profile information
7. Once the user confirms the screen, they are brought back to the KWL Digital page and logged in directly.
8. The approval steps only need to be done once by the student. The next time they visit KWL Digital, they are logged into the app directly.

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<sup>1</sup> KWL Digital only uses the name and email address of the student from the Google profile. No other information is accessed or retained in any way.



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# Google SSO Intergration with KWL Digital

## 4 KWL Digital In-House SSO

This SSO technique is for organisations that do not or cannot use the Google SSO described above.

### 4.1 Assumptions

This method of integration assumes that the organisation has a centralised website or app which allows students access to the various digital resources by clicking on links within that app<sup>2</sup>.

### 4.2 Pre-Requisites

Any organisation that wants to use this method of integration would first have to send all the student data to KWL for setting up the user-accounts as has been the arrangement to date. The passwords for all students could be unique per student or could be a single generic password used for all students.

### 4.3 Technical Setup

KWL Digital supports auto-signin by detecting authentication information from the url used to open the web or app versions. If it detects authentication information in the URL, it would use that to log-in the user directly without first showing them the login screen.

Since KWL Digital implements universal links specifications, the method to build the urls is exactly the same for the web and app versions. The web or app versions are opened based on how the user is interacting with the link for example; When the link is clicked on an iPad that already has the KWL Digital app installed, the app would be opened and auto-logged in. If the iPad does not have the app installed or the user is on a Windows 7 computer, the link would be opened in the browser and KWL Digital would auto log in the user.

#### 4.3.1 Building Auto-Signin URLs for KWL Digital

The auto-sign in urls are made up of three parts as shown below:

<https://app.kwl.com.au/?user=test@test.com&pass=cXdlcnR5>



KWL Digital base URL    Username Section    Password Section

- *KWL Digital base URL*: This is the base url for KWL Digital
- Username Section: The username of the student should be sent as the value for the "user" parameter. Note that the parameter is case sensitive and the username should be exactly like its setup
- Password Section: The password section would contain the password for that student as the value for the "pass" parameter. The password itself should be BASE64 encoded string of the actual password. If the organisation is using a generic password for all accounts, it would just be the same string for all urls.



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## 4.4 Login Flow

The entire login flow would be as follows:

1. Student logs into the organisation wrapper app or website with their usernames and passwords issued by the organisation
2. The app or website builds the KWL Digital url by fetching the KWL Digital username of the student that was sent for account creation. For ease of use, this can also be the same username that the student used to login into the main app or website.
3. The password for the student or the generic password as the case may be is appended to the url so that the final url looks like what was shown in the previous section
4. Care should be taken that the final url itself is not shown to the student directly or not allowed to be easily copied. The URL should be set preferably as an onClick or set as an href on the KWL Digital brand logo or name.
5. When the student clicks on the link, they are redirected to the KWL Digital website or app based on the device and logged in directly with the username and password in the url
6. If the authentication is unsuccessful, the user sees an error message and is taken to the login page.

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<sup>2</sup> It is binding on organisations to have the autosignin links for KWL Digital always behind an authentication so that these links cannot be accessed publicly by any user



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## CHANGE HISTORY

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