SharePoint Learning Kit
Scenario Guide

What can you do with SharePoint Learning Kit? This document looks at 4 different scenarios which you can deploy in your environment.

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Introduction

SharePoint Learning Kit is currently used in many industries but it has mainly been developed to be used in education sector. This E-Learning Tool can bring a different element of learning to pupils giving them access to their marks on work automatically having submitted it to the server.

In this scenario whitepaper we will look at 4 different ways SharePoint Learning Kit can be used ranging from a single site to a whole school to multiple schools.

What is SharePoint Learning Kit?

SharePoint Learning Kit also known as SLK is an E-Learning delivery application that is built to run on top of SharePoint 2007 and 2010. The certified SCORM 2004 product allows content from a SharePoint document library to be assigned, tracked and then marked to a group of learners.

Supporting SCORM 2004, SCORM 1.2 and Class Server content the learning resource can be assigned by the individual to themselves and to a group.

This SharePoint feature can be used in all version of SharePoint including the Windows SharePoint Services 3.0 and SharePoint Foundation 2010.

SharePoint Learning Kit is currently at version 1.5 and available in 29 international languages. To download SharePoint Learning Kit navigate to http://slk.codeplex.com and click on the download button.

Assignment List Web Part

With SharePoint Learning Kit there is one web part that is called the Assignment List Web Part which has 2 functions. For the instructor it allows the member of staff to see the number of students that have submitted work. For the Learner it lists all the assignments they have to complete in that SharePoint site.

SLK Learner

When a student logs into the site and has the Assignment List Web Part of their page they are given a list of all the assignments they have to complete with the score they can achieve.

<table>
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<th>Assignment List Web Part</th>
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<tbody>
<tr>
<td><strong>To Do</strong></td>
</tr>
<tr>
<td>Overtime</td>
</tr>
<tr>
<td>Due Today</td>
</tr>
<tr>
<td>Due This Week</td>
</tr>
<tr>
<td>Due Next Week</td>
</tr>
<tr>
<td>Returned</td>
</tr>
<tr>
<td>All Assignments</td>
</tr>
</tbody>
</table>

Figure 1: Assignment List Web Part view for SLK Learner
To start the assignment the learner will select the name of the assignment which will take them to a holding page that will list information such as the description, date of completion and the final score they could achieve. To start the assignment they select Begin Assignment.

**SLK Instructor**

If a SharePoint User is assigned as a SLK Instructor they have the permission to assign files from a document library to any assigned SLK Learners accounts. Once an assignment has been set, the Assignment List Web Part will list the assignment name and the number of students that have submitted their assignment (See figure 2).

![Assignment List Web Part](image)

**Figure 2: Assignment List Web Part view for SLK Instructor.**

An instructor can select the assignment name from the Assignment List Web Part and then view the score the student received from the assignment (figure 3). As this assignment was a SCORM file with questions set out in the assignment the server has automatically given a score to the student. This score can be changed by the instructor and then any comments that have been added are sent back to the learner for them to review.

![ Instructor view of submitted assignments](image)

**Figure 3: Instructor view of submitted assignments**

**E-Learning Actions**

Both the instructor and the learner can use the E-Learning Actions button. This feature turns the document in a document library into an assignment allowing you to assign the file to yourself as an individual or a group of learners.
Figure 4.0 E-Learning Action button in SharePoint document library.

On the following page the user is asked if they would like to assign the document to themselves. If the user is an SLK instructor they will also see the name of the site that they can assign the resource to.

Figure 5: Assign to myself or group

Having selected a group you can then select the date the assignment should appear in the student Assignment List, when they have to have the assignment completed by and any other instruction you may want to give them. Towards the bottom of the page you can then select either to assign to the whole group or different individuals. You may want to use this feature to assign different levels of work to students with different abilities in the group.

**Technical Information**

SharePoint Learning Kit requires its own SQL Server database which stores information such as the assignments, who they are assigned to and what score the student received on their assignment. This database doesn’t grow very large and depending on your use, will not grow anything larger than 15MB a year.

This feature has to be deployed to the Central Admin using a stsadm command for SharePoint 2007 or PowerShell for SharePoint 2010. The Central Admin Feature has to enabled, allowing you create a database per site collection. If you want users to be able assign documents in other SharePoint Web Applications or Site Collections you have to be using the same SharePoint Learning Kit database. You should create a new database using a naming scheme so you know which database is which if you log into SQL Server database.

You must add the Assignment List Web Part in each Site Collection allowing you to use it. You must also enable the SharePoint Learning Kit Feature on each site allowing you assign documents from any document libraries (E-Learning Actions).
**Single Site Deployment**

A single site deployment is the basis of all other deployments of SharePoint Learning Kit in any web application or site collection. We create a single group of SLK Instructor who will be able to assign documents to the SLK Learners groups. There may be SharePoint permissions groups already created for the site allowing different users to view (viewers), add or edit (members) or site owners (owners). These SharePoint groups can all be changed to also be SLK Instructors (members) and SLK Learners (viewers). This can help when managing permissions so you only have 3 groups instead of 5.

A document library must be created within this site to allow documents to be assigned and when selecting E-Learning Actions it will allow you to assign the document to yourself or to this site (you will see the site name).

![Figure 6: Ability to assign to yourself or to that group](image)

A single site may be used in a small organisation for training, where permissions don’t change very frequently and they need a single document library to assign SCORM objects to new employees for their new starter training. A single deployment may be used in other deployment types where they need to keep away from the structure that is created for all their classes or multiple institutions allowing special permissions to be created and documents stored away for others.
Class Sites
There are 3 main important parts to this type of deployments, Site Template, Permissions and Structure.

Site Template
When we create a SharePoint site we can use one of the standard templates which come out of the box but we can also create our own template. We may decide to create a site template that all classes will get as their starting point. A site template can include,

- Document Library
  - A central location for all of the learner resource that are available for the students to use. These can be documents that are assigned but the lecture or other documents that may be useful to the Learner.

- Announcements/News
  - Give the learners news of what is going on class, reminds of what they may need for the next class other information that you may want to give them

- Discussion Board
  - All students can collaborate together in a forum allowing them to discuss lesson topics or help each other out if they are stuck.

- Wikis Libraries
  - Collaborate with the whole group creates knowledge basis of research and other information learned during lessons and homework

In a site template you can set which web parts you want on the home page or any other page. It would be recommended that you create a good/easy to use home page that allows both students and staff to view the information that is most relevant to them. One web part that can be added would be the Assignment List Web Part so students can view all assignments when they go to the site homepage.

Note:
It is important to get the template correct at the start otherwise you will have to go and modify each site.

Permissions
The permissions for a class site are the same as a single deployment. There will be a single SLK Instructor group and all the students will be in the SLK Learners. Each site will have different permissions allowing the learners only to see classes they attend and the instructor only to see the classes they teach. This becomes even more important when we start looking at the structure of the classes.

Site Structure
SharePoint is designed only to show users what they have permission to. If they don’t have permission to a site it won’t appear in the site navigation and if the user tries to navigate to the site using the URL they will be presented with a ‘You don’t have permission’ error message.
In a school of around 800 pupils there will be around 1000 different timetabled classes for lessons, ability and year. With this scenario we create a site for every class resulting in 1000 different sites each with their own SLK Learners and SLK Instructor group causing a lot administration to group. This is where a previsioning tool becomes very useful analysing any changes to the timetable and updating the SLK groups and permissions in SharePoint.

In the image (figure x.x) below we are logged in as a student and when using the SharePoint navigation they can only see the sites and classes they are part of ensuring they can’t see any learning resources other than their own.

For this to work, we need to have 1 top level site which hosts all the other class sites. The top level site will require every users who is an SLK Lectures or SLK Learner to have view permissions otherwise they won’t be able to use the top navigation correctly.

Each academic year you will want to create a new top level site to host this years classes and you will still want to give permission to staff to the previous year’s classes. This will allow them to still access any resources or grades they may need to access. To help us with this and preparing for the future, when we create the top level site we want to create it with a different URL for each year. For example Academic year 2010/2011 could be [http://portal.newwaveacademy.com/MyClasses201011/](http://portal.newwaveacademy.com/MyClasses201011/). The following year we will create [http://portal.newwaveacademy.com/MyClasses201112/](http://portal.newwaveacademy.com/MyClasses201112/) but we can still use the same site name such as My Classes or Lessons.
SharePoint Learning Kit Hidden Groups

In your SharePoint deployment we may already have a specific structure that we want to stick to and don’t want to create a SharePoint site per class. Instead there is the ability to assign documents from any site within the SharePoint environment as long as the SharePoint Learning Kit feature is enabled in that site.

We still need to create the structure that was mentioned on the previous page but instead of giving the SLK Learners and SLK Instructor permission to the top level site we only want to give the SharePoint administrator permission. We also don’t need to worry about what template we use as long as we get the permission correct for the SLK users and we have the SharePoint Learning Kit feature enabled on the site.

Instead we place the Assignment List Web Part in 2 separate locations. The first is for the Instructors. This might be added to the instructor’s site or in their MySite allowing them to view all assignments they have currently outstanding with their classes. The other is also for students and you may decide to place this in an easily accessible place for students to find. Here it will list all their outstanding assignments and results.

There is a configuration change within the Assignment List Web Part for this to work. When you have added the web part to your page, open Web Part Properties for the Assignment List and uncheck ‘Show Only This Site’s Assignments’.

To assign a resource to a class we now navigate to a document library within our SharePoint environment and select E-Learning Actions. On the next page we can then decide whether to assign the resource to our self or to our SLK sites where we are the instructor.

The structure of the SharePoint environment allows each department to create a set of sites for each of their topics so there may be a site for Romeo and Juliet, Hamlet and Shakespeare.

This keeps our learning resource in one location so we can control the updates to the files, versions and not have to move documents to the specific class we are assigning the resource.
Multiple SharePoint Web Applications
You may have a large SharePoint deployment that hosts several schools and we want to increase collaboration between the schools. We may also have students move from school to school for different lessons and SharePoint Learning Kit can bring additional features to help in this process assuming that the configuration is set correctly.

The important part to this scenario is the SharePoint Learning Kit database and how we configure each site collection. You can leave SharePoint Learning Kit to handle cross site collection and multiple SharePoint web applications in the same farm as long as you use the same SLK database. When we enable a site collection to use SLK we need to ensure that it uses the same database. When enabling this in Central Admin ensure you use the same database name but do not check ‘Create database’.

Figure 10: SLK database settings in Central Admin

Each school can have their own configuration of SharePoint Learning Kit as discussed earlier as this allows the school to manage their E-Learning the way they want.

Figure 11: Example structure of multiple SharePoint Web Application (including MySites) using 1 SLK database

The other important part to this scenario is the E-Learning Action button. Documents can be stored in any document library in any site, site collection or web application and as long as the SLK feature is enabled a SLK Lecture will be able to assign the document to any of their SLK sites in any web application.

As an example let’s imagine there are 10 schools on our SharePoint farm. They each have their own site collection in a single web application, there is a second web application as a collaboration area for all schools to work together on learning resources. Each user has their own MySite with their own profile.
Each school have deployed the SharePoint Learning Kit Hidden Sites scenario allowing them to have their own site structure for each of their subject areas but not all resources are stored here as the group of schools agree to share their resources in the collaboration site.

A science teacher logs on and goes straight to their MySite where they see a list of activities in their Active Feed and using the Assignment List Web Part they see that all students have submitted all their work before the due date.

All the science teachers across all the schools have a different part of the science curriculum to write so she uploads the latest version of learning resources on Volcano’s. Tomorrow she is teaching here Year 8 students biology so she navigates to the biology sites and finds the information she is looking for on the heart. She finds the right documents and selects E-Learning Actions and she is then asked which call she would like to assign it to. She looks at the list of 8 classes and easily finds Science Y8S2 and sets some properties on the assignment so it doesn’t get given to the pupils until the start of the lesson and they have until the end of the lesson to complete it.

Now all the assignments have been assigned to the class she navigates back to her MySite and checks to see what marks her pupils got in her year 9 science class. She gives useful feedback to the individuals helping them on this important topic.