# SITEIMPROVE TRAINING NOTES

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Login to Siteimprove at https://my2.siteimprove.com/ to see the DCI score dashboard:

You can change dashboard type using the highlighted drop down menu.

If you only have access to a single group, this should be selected by default. If you have more than single group access, you need to filter to view only results for the group you want to check:

As long as the above filter is selected, any results you view in Siteimprove across the modules will show MVLS results, until the filter is removed using the X.
Quality Assurance

Pages with broken links

Broken links at page level 3 and deeper

A level refers to the number of clicks between the homepage and a given page. Pages at level 3 and deeper are linked to the homepage (level 1) via another page at level 2.

Broken links on level 2 pages

See all the pages where broken links have been found. If a link seems to work fine in your browser but is flagged here, you can learn about the different scenarios where false positive broken links might occur.

From the DCI score dashboard select the Quality Assurance module, using one of the two options shown on the screen below:

The QA overview screen will display, select “Broken links are page level 3 and deeper”: 
Please note – this screen is called “Pages with broken links” once selected:

Select the filter for Broken links to re-order the pages, showing the pages with the most broken links at the top of the screen:

Now we will explore the 2 buttons on each row, the first is the page inspector that provides details on the error you are checking (broken links):

Select the Inspector to open a new tab with details of the broken links on the page:
The Broken links menu on the left lists all the occurrences on the page and you can select between them for more detail on where the broken links are:


Sometimes broken links are only visible in the HTML code of the page, so if you don’t see it in the content view, select Highlight in HTML:

You can easily switch back and forth between the content view and HTML to identify where the issue is.
Click on the link from the page content view, or copy and paste the link from the html view into a new tab:

If the broken link needs fixed or removed, we need to edit the page in t4.

The second is a link to Open the page with broken links:

Select the Open button to view the page on the live website:
Scroll down to the page footer, then select the **Edit in t4** link:

Login to t4 using your GUID and password combination:

After logging in, you will be viewing the content tab of the page – select the **content**, or the **blue actions button > edit** to open it for editing:
Now that we are viewing the content for the page in t4, we can edit it to fix, or remove the broken links:

Once the broken link has been removed/fixed, we need to tell Siteimprove that this has been done, to clear the entry off the list.

If you still have the Page Inspector open, this can be done there, however it’s clearer and easier to use the main Siteimprove “Pages with broken links” tab that you should still have open.

View the Pages with broken links, **click on Broken links** to expand the list of broken links on the page, with Siteimprove showing 5 items per page, across 3 pages. You can change these options:
For the 403: Forbidden link that we checked (which loaded the page), we now want to dismiss this broken link as being checked - dismissing it as the page does load, however due to being located on a non-UofG server, comes up as forbidden. This is expected as Siteimprove doesn’t crawl that server.

In the rows of broken links on the page, select Dismiss from the Decisions column on the right > check Dismiss forever > add a Comment “secure page loads ok” for a 403: Forbidden > then Confirm.

Some of the HTTP status messages that you will see includes:

**404**: Not Found – target page for link is no longer there – update or remove broken link

**403**: Forbidden – page is not accessible by Siteimprove – if it loads, dismiss, if not, remove link

**410**: Gone – page has been archived – update or remove broken link

**500**: Internal Server Error – Site experiencing technical difficulties – update or remove link

**503**: Service Unavailable – site cannot be reached as offline/moved – update or remove link

**Broken links (overall)**

Confirmed broken links

We will now check the next item in the QA list/left hand navigation – select “Broken links”:
The Broken links section lists similar information as the previous section but instead of listing a page and all the broken links on it, the list shows a broken link with all the pages it is broken on:

In the above screen you can see the broken link (ending /contact/), the HTTP status 404: Not Found (which we know will require a fix for the broken link), how many pages have the broken link on them, along with the decision option.

This check is useful for when you have a section of your website set with left hand navigation to make it a microsite, using the page layout options.

When this is done in t4, you need to have a subsection with contact details and an output uri of just contact, for the footer Contact us link to work. If this is missing, you will see errors like the one above, multiple broken Contact us links across all your pages.

Once you have added the missing contact us section in t4, then checked the broken links in the footer the following day to ensure they are no longer an issue, then you can dismiss the broken link.

Some other results that you might see in this section includes:

Broken images – an image that was being used on multiple pages has been deleted from the t4 media library, resulting in broken links on multiple pages. Edit these pages, then remove or replace the broken image and save/approve.

Multiple broken links on staff pages – usually when staff link their Research Profile to a Project or Research section in t4 but the project has ended and the website has been removed. Edit these pages to remove or update the broken links before saving.

Now we will check the next item on the list - it’s a broken image being used in multiple newsletter sections. You can see from the information below that the broken image appears on several referring pages, so will need removed from each one, or the existing entry in the t4 media library should have a new/replacement image uploaded, in place of 541519, which when selected (using the open button to the right of the page inspector) will show the image as a broken media file link, as seen in the second image:
If you have no suitable replacement, or the image and pages it is on are no longer required, then after the file is deleted from the media library and the server the issue should clear out from Siteimprove after the next crawl. If it doesn’t, check with the Webteam so we can purge the server, to ensure the file is completely removed/deleted.

**QA > Inventory**

A few more useful things that you can check in the Quality Assurance Module, are in the Inventory menu, Documents in need of updating (PDF/Word) and all Media files in need of updating:
Documents in need of updating

View details of all documents in your chosen file format: Excel, PDF, PowerPoint, Word, XML or All documents. Please note - limited data is available for external documents and documents that have been excluded from the crawl. Click on Documents from the Inventory menu, then select PDF:

For each document type, you will find useful info such as the media ID number and pages that the file is located on:

Media files in need of updating

The Media page offers information about Audio, Image, Video, Flash and Java Applet files found (depending on the type of file you have chosen to look at), divided into internal and external categories. Select images from the list of Media files:
Using this section can be a useful way to list all files of a certain type from a group, including the info below that can also be found in the Accessibility Module:

Images larger than 1MB
Pages with images larger than 1MB

The options and filters on the screen below should be getting familiar now, with options to view the affected page, image size, filter types for the selection, the page inspector and open page button:

Pages with misspellings/words to review
A list of all pages with misspellings or words that need to be reviewed.

From the left hand menu, select Spelling > “Pages with Misspellings or words to review”:
Open the details for the first misspelling using the drop-down option next to the page inspector and open page buttons:

Once open, you can see the misspelled word along with options to approve the word on the page, or for the whole site. Check the box next to the word to see more options:

If you want to review words in the inventory, or previous decisions on spellings, these options are in the main Spelling menu:
Select “MAIN MENU” below the Dashboard and above the Quality Assurance menu.

Select “Accessibility” from the left-hand menu.

**Accessibility Overview**

From the Accessibility overview screen, select either Issues from the left, or See all issues under the “Fix these issues to improve your score” heading on the page:

**Issues**

We will now go through the main issues that affect your Accessibility score in Siteimprove.

**Headings are not structured**

One or more heading levels have been skipped.

Heading tags help assistive technology users to understand how content is structured. They’re also used for in-page screen reader navigation.

When adding heading tags, you should ensure that they follow a nested structure. h1 is used for the primary heading, followed by h2 for subheadings, and so on to h6.
Correcting your heading structure may also help to improve your site’s SEO.

Scroll down to find the unstructured headings list > click the link/text to open the first issue:

This will open the page with the issue as shown below:
Click the link/text to the left of the open button to open a new tab with the Page Inspector:

You can see the selected issue highlighted (SCREDS Clinical Lecturer text) and hopefully you noticed the 4 occurrences on the page, from the previous list of issues. This also displays on the left menu when viewing the page inspector, with each one needing selected to view it on the page.

Switch between the Content view and HTML view if you are struggling to find the issue on the page. From the HTML view, you can see that the headings on the page jump from an h2 to an h4:

As with other examples, if you are unsure how to fix the issue, or require more info, this can be found when you select “Why is this an issue?” as shown below:
To resolve these issues, edit the page in t4, then change the headings from an h4 to an h3. Normally, the main page header is your h1, so these should be edited to follow the nested structure. Once done, a Siteimprove crawl should clear the issue on the page, once all 4 issues on the page are fixed.

**Link/Inline Frame/Button missing a text alternative**

All three of these issues are similar, missing alt text for each element that needs added to the code in t4 to resolve the problem.

*Links should always have a text alternative.* The link text can be inserted into the HTML — it does not need to be visible to pass this check.

Links represented by images or icons can be problematic for visitors who are blind or have low vision. The text alternative should describe the link’s purpose — or what visitors can expect to find after they click it.
View the first issue > select the text/link to open the page inspector, then select the open page button, so we can view/edit the page in t4:

Click on the link/text to view the page inspector:

You can see it’s the images causing problems from the red highlight above. Click HTML view:
The above example can be fixed by adding alt text to the image in the media library. The quickest way to do this is to add the 6-digit media ID number shown in the code above (486822) into the jump field of the t4 media library:

In the General tab of the media file entry you can see the empty Description field. Either add descriptive text of the image yourself, or pass on the job to the person who added the file that should have entered alt text when uploading (view the History tab below to see who added the file):

Next, we will look at a standard example of a link missing a text alternative:
For this one, it's not obvious where the links are, so we need to view the HTML code:

An example of correct link text in the code would look like this:

```html
<a href="http://www.gla.ac.uk/postgraduate/taught/">Postgraduate Taught Courses</a>
```

Knowing this, you can see in the code in the above image that the line break `</br>` should be replaced by the descriptive text “BC-Stem” or similar.

The two related issues with missing text alternatives are similar to fix, just add the missing text element to the link/button or iframe (with media alt text added to the media library).

Every inline frame (iframe) should have a text alternative that summarises its content or purpose.

Inline frames (iframes) are used to insert content from other parts of the web - A title that summarises the visual content will help screen reader users to understand the iframe's purpose on the page.

**Buttons** should always have a text label. The label can be inserted into the HTML — it does not need to be visible to pass this check.

If a text alternative is not provided, buttons represented by images or icons may be unusable to visitors using assistive technology - In this case, the text alternative should describe what the button does or what users can expect to happen if they click it (not the visual features of the button).

**Container element is empty**

Some roles are designed to contain other roles. This element has this type of role, but it doesn't contain any required-owned elements.

Roles provide information about content structure and how page elements fit together.

Some roles depend on other roles for context. For example, the role list item can only really be meaningful in the context of a list or group.
What this means, is that there is an unordered list on the page with an extra opening and closing list tag that is not required. **Open the webpage and view the Siteimprove page inspector:**

You can see on the inspector that there is a list within a list:
Empty headings

These pages contain one or more "empty" headings (heading tags with no text content).

Headings help to break up content and make it easier for visitors to scan a page for information. They need to be set up correctly so that visitors using screen readers can use them in this way.

A heading is considered "empty" if there is no text for a screen reader to relay to the user. Image headings are considered empty if no text alternative is available.

Empty headings can also be created accidentally in some CMS editors — this is usually due to the "heading" style being applied to spaces in between text.

Scroll down to view any pages with this issue:
Click the main link/text to open the page inspector:

View the HTML code in the page inspector, where you can clearly see the h3 tags with no text inbetween:

Delete the empty <h3 styling-optional> </h3> tags to clear the issue.

These issues are usually empty <p> paragraph or <h> headers, created when the T4 editor incorrectly decides they need a few extra returns between paragraphs, with either standard text selected (leaving empty <p> tags) or having a header style selected (leaving empty <h3> or similar tags), although other empty code elements will sometimes display.

Form field missing a label

Every form element should have a descriptive text label.

Unclear labels make form-filling harder for everyone.

A label may already be visible on the page — but to be accessible, that label needs to be associated with the form element in the HTML. This helps visitors using screen readers to understand what information is required, while also making it easier for speech-input users to control the form element.
Select Accessibility > Issues > Form field missing a label:

By now you should be used to opening both the direct link to the page, to edit the issue in t4, and the page inspector for more details:

You can see the 4 form fields on the page are affected by the issue, with us viewing the first one.

Click on Code examples:

(once we view the Code examples, we’ll then be viewing the HTML view using the button below it)
You can see from the code examples how to fix the issue:

At the top left, click the left arrow next to the text “Form field missing a label”, then click HTML view:

You can see we are viewing the first instance again and can view the full code, which shows us that the form field is missing a label, so add this in to resolve the issue as indicated in the examples.

**Colour contrast does not meet minimum requirement**

**Description** - There is insufficient colour contrast between the text and background on this page to meet the minimum contrast requirement.

**Learn more** - Text and background colours that conflict or have too little contrast between each other can cause readability issues for users who are colour blind or have low vision (vision loss equivalent to approx. 20/40 vision).
To meet the WCAG contrast requirement, you should have a contrast ratio of 4.5:1 for normal text, and 3:1 for large text (18pt and above, or 14pt bold).

In Accessibility > Issues, select “Colour contrast does not meet minimum requirement” to view more details:

Select the Page inspector link and Open page button, which you should be very familiar with now:

The Page inspector shows issues with the text and bullet points which are all using a custom text colour that is below contrast ratio requirements. View the Code examples:
Note the example solutions below to see if they help. If they don’t and you are unable to amend the contrast properly, speak to your PWP for help. They can contact the Webteam for assistance if it is not obvious where the issue is:

Select the back arrow highlighted above to return to the page inspector, then select HTML view:

Note the \(<p style="color: #3a8794;"\>). The colour code #3a8794 is the problem here as the light blue being used is too light to be properly accessible. If in doubt, change to black text on a white background.

The above example is also a good point to highlight that the text colour being used is not meeting brand colour guidance for the web:

[www.gla.ac.uk/myglasgow/staff/webpublishing/advicefort4users/webcolourpalette](http://www.gla.ac.uk/myglasgow/staff/webpublishing/advicefort4users/webcolourpalette)

If you must use colour to display differences to the content you are adding, you should always make sure the colour palette above is being followed, as these have already been tested for contrast ratio.

If using splash text, it’s always best to check that the text colour is a strong enough contrast ratio to be clearly visibly compared to the background colour. Use simple combinations if you are not sure.
PDF’s – Accessibility tested PDF’s

We will now review Siteimprove’s PDF checker. Click on “Dashboard” to view the DCI score dashboard (or your default/current dashboard) then select the Accessibility Module:

Scroll down and select PDFs:

In the PDF’s section the issues are laid out in a similar fashion to others we have looked at:

The Document Report is like the Page Inspector, there is an open PDF button and you can see the number and list of issues, by expanding to open the drop down for the issues affecting the PDF.
Click on the Document Report link for the first item in your list and a new tab will open, listing the Accessibility issues affecting the PDF on the left:

If you hover the mouse over the ? icon, you will get extra details on the document issues:

To fix this one, the above suggestion will work, or you can open the PDF in Adobe Acrobat Pro (if you have access) and run the Accessibility checker built in, to fix issues like this with one click.

Acrobat Pro will run through your PDF and add missing bookmarks.

Without this, the best thing to do is fix the original Word document, if you can locate or access the file. You can also work in Word with the Accessibility checker running > Review > Check Accessibility.
All Word and PDF documents should have a title, ensure this is added to the document properties. Acrobat and other PDF accessibility checkers can open this properties area for you to add a title.

The above should be familiar – always add alt text to any images uploaded to the t4 media library.
If the heading structure is wrong, or you have a table with no headings (as shown below) then using Adobe Acrobat Pro Accessibility checker, or editing the original Word file is the best quick fix.
If we exit the Document Report to view the list of Accessibility-tested PDFs, you can see a different issue on the next PDF, along with the suggestions on how to fix it:

Policy > My policies

Policies are extra checks that can be set up, with the list below the most common ones addressing accessibility issues.

From the Siteimprove menu, select “Policy” to be taken to the Policy overview screen:

Select “My policies” from the menu, you can select favourites using the stars:
Select the list of favourites shown in the screen below, the select the Favourites tab:

You can also sort using the Priority filter as indicated. Select the first item on the list:

Click Here link text

Link text match is exactly “click here” or is exactly “here”

This policy is set up to find all instances of a link using the text “click here” or “here” which is bad practice for accessibility (see writing for the web).

Select the Click Here link text policy to view the page below, with familiar links that open a page report, along with the button to open the page (allowing you to quickly edit in t4 if required):
Click on the link to view a page report:

This will highlight instances on the page of here or click here being used for links. Once amended, these issues should clear out from Siteimprove following a publish/crawl cycle.

EU Accessibility Directive:
Documents published on or after 23 September 2018

Identifies documents that were published on or after 23 September 2018. The EU’s accessibility directive requires that all documents and forms published on public sector websites from this date onward are made accessible within two years.

Lists all documents on a page that are required to be checked and made accessible (PDF, Word or other office files) in order to comply with Accessibility legislation.

Click on the link for a Document report for PDF’s (not available for Word) and also use the familiar open page button to then view or edit the page in t4, or filter the selection order:

You should use MS Word or Adobe Acrobat accessibility checkers, or manual fixes, to sort out any issues and make your documents accessible.
Once your media files are accessible, these can be uploaded in place of the existing file in the t4 media library. As long as the name and no other file details are changed, then the file should update on the website before the nightly publish, following the next media server synch which is every couple of hours.

**Empty alt text (Images missing an alt attribute)**

Alternative text associated with an image allows meaning to be conveyed to someone with a visual impairment

Lists the instances of images being used on a page that are missing a description/alt text:

We need to find the media ID number from the page inspector, so we can Add alt text to this image.

Click the link to view the Page report, then note the affected image:
As seen above and below, you can switch between page content and HTML view, select Show HTML:

Siteimprove keeps the image highlighted in red while displaying the HTML code.

You are looking for the 5 to 7 digit media ID number for your t4 image file:

Example - src="/media/Media_1006254_smxx.png"

With this noted, we then enter the image media ID number to the Jump field in the media library:

Finally, add the missing alt text to the description field for the image:
Email addresses missing a "mailto:" attribute

Find all email addresses that do not have the 'mailto:' attribute - It is not good practice to have an email address that is not clickable. This will require the user to copy the email address in order to send an email.

Shows any email address on a page that needs a “mailto:” attribute attached to it, allowing easier click and send options. Using the familiar link/page report and button to view the page/edit in t4 options, switch between the Show page content and Show HTML options to identify the link, then fix in t4:

The correct code for the example above, with missing mailto: prefix added:

```html
<p>mailto:mvls-pgt-gsa@glasgow.ac.uk</p>
```

In t4, if you add an email address using the link option, the editor will recognise an email address and prompt you to automatically add the mailto: attribute.

Fixed-width tables

In accordance with responsive web design guidelines, fixed-width tables should be avoided to ensure that they are optimized for viewing on mobile devices.

Will list tables set with a fixed width, which is not good for the flexible web design grid of responsive t4 content types. Identify the pages these are on using the page inspector and open page button, then remove the fixed width for the table using the edit table properties option in the editor.

This last issue is not a policy but something to keep an eye out for in the QA module:

Links to unsafe domains

Domains that have been identified as potentially risky by Google's Web Risk API. An advisory is provided by Google in regards to Web Risk. If users go to potentially risky domains through links on your site, this can reflect negatively on your site's trustworthiness.

If you discover the above issue, please email webteam@glasgow.ac.uk for us to check.