Client: Ayrshire College

Digital Inclusion Overview: Website.

This report helps your organisation identify the likely experiences of disabled students accessing your website. There are two elements to website accessibility that can be explored:

- Technical accessibility - does the resource meet accessibility standards? Would it present barriers to users with particular access needs?
- Informational accessibility - does the information exist for a disabled student to
    - independently meet their own needs in accessing the website or
    - ascertain whether the college technology infrastructure will support their productivity and independence?

Caveats

The technical audit explores some of the features that impact on screen reader use, but it does not include screen reader testing. Screen reader accessibility is a highly skilled and time-consuming activity that needs to be conducted on key template pages.

The reporting is based on a single day's exploration covering both website (this report) and VLE (accompanying report) and so it only represents a sample of the content on the relevant platforms. As a result of sampling choices, we may have underreported either good practices or areas for improvement. The report has most value when an institution reflects on the findings, learns from the approaches and applies them to improve the student experience.

It is also important to recognise and celebrate the areas where you have existing strengths so that you can sustain them and build on them.

The report is arranged in two parts. The bulk of it consists of detailed comments in the appendices (which should allow you to extrapolate to other courses and resources). At the front of the report are suggested long-term and short-term priorities. These are drawn from the observations in the appendices.

Recommendations

Short term

Website – technical

- Colour contrasts fail on many pages (fig 12). This may be due to branding choices. We recommend either the background or the foreground colours (or both) are tweaked in term of their luminosity until they meet the recommended [colour contrast of 4.5:1](). Currently some of the core colour swatches have contrasts between 1.5 and 2.7 to 1.
- The visual indication of the current tab focus needs to be more consistent. It is very clear in some parts of the website but not for others (fig 14).
- The heading structure on some pages needs to be improved (fig 21). This probably involves tweaking page templates.

Website - information and guidance

- Since using Browsealoud on the VLE involved getting permissions it would be helpful if there was information available to students explaining that this was a bona fide process.
- There would be value in users having information on how to personalise downloadable content such as PDF policy documents etc. Opening a PDF in a browser compared to Adobe Reader or Word 2016 can give very different accessibility options.

Website – training

- Staff creating videos for the website (fig 11) should either
  - learn how to enable YouTube auto captioning and provide guidance to clarify that the captions are likely to contain inaccuracies or
  - use any scripts developed in making the video to provide a transcript of the narrated content.
- Staff adding content to web pages should be trained in appropriate use of heading styles to aid navigation efficiency for screen reader users or those relying on heading outline tools to skim read content (fig 15).
- The importance of hyperlinks having unique and meaningful link text needs to be emphasised to all adding content to web pages. Screen reader users relying on link lists need to have enough information in the description to know whether to follow the link (fig 16-17).

Long term

Website – technical

- We recommend that the current ARIA implementation is checked to ensure it adds to the experience of screen reader users (fig 10). There is [good ARIA guidance available]()

online but user testing and feedback is often a quick and effective way of fine tuning practice.

- Skip links on the main page templates would make navigation more efficient for keyboard users.
- The tab order should also be looked at to minimise the mismatch between the visual page navigation and the physical tab sequence (fig 13).
- There is value in looking at the way Search works. There are currently some issues with the information returned (fig 25).

Website - information and guidance

- Most of the PDFs sampled lacked bookmarks or any other obvious navigation features to support assistive technology users. Teaching staff to create accessible PDFs from accessible Word documents is a straightforward process.

Website – training

- Staff involved in creating key documents for the website need training and support in knowing how to do it accessibly. This has implications for recommended both tools (for example used to create PDFs) and workflows (for example ensuring PDFs are created from an accessible Word document with the appropriate export options used). See figure 18.
- Marketing teams responsible for branding choices need to review recommended colour choices so that branding helps to meet accessibility obligations (fig 19).
- Although not applicable to all staff, some involved in content production may need to develop more technical skills in using Adobe Acrobat or InDesign in order to identify and fix more advanced features like reading order (figure 20) as well as ensuring PDFs are tagged for navigation.

Appendices

Website:

What works

Website - technical

- The Browsealoud plugin offers potential users a wide range of personalisation options.
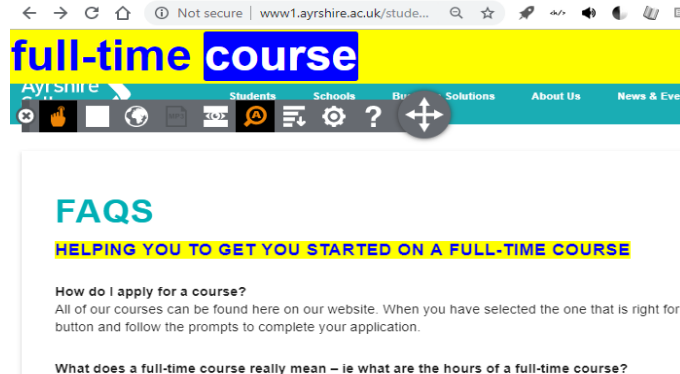
Figure 1 - screenshot of Browsealoud magnification feature in action alongside Browsealoud toolbar.

- Zoom and reflow work well up to 400%, allowing users with visual impairment to get a good degree of magnification.
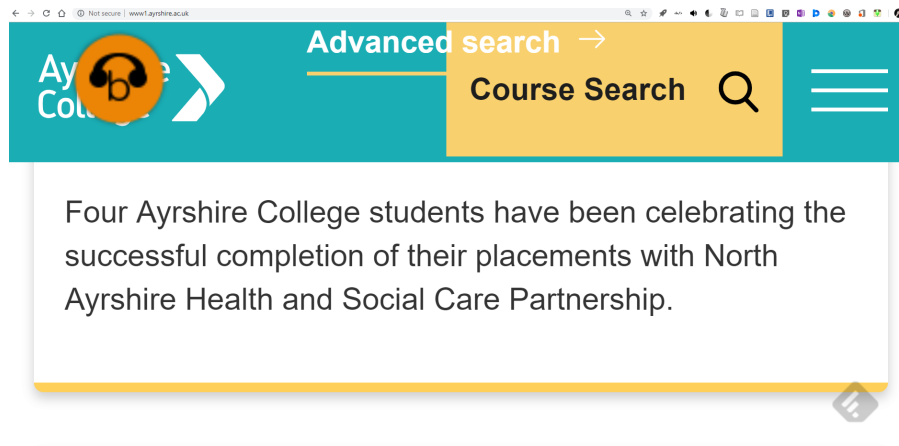

Figure 2 - screenshot shows highly magnified web content on a responsive page. This benefits visually impaired users as well as those working on small screens.

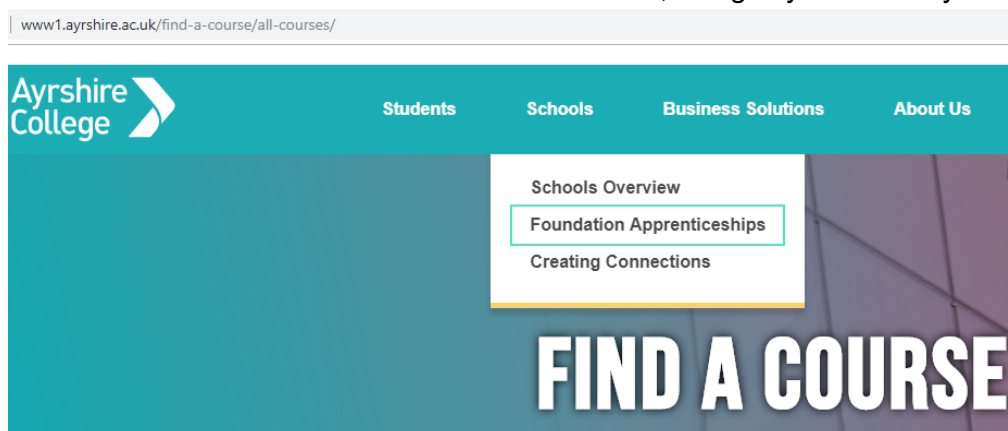- Main menu items can be accessed without a mouse, using keystrokes only.

Figure 3 - screenshot shows current tab focus for keyboard-only access. This benefits users with coordination difficulties.

- This also applied to course filters as shown below:
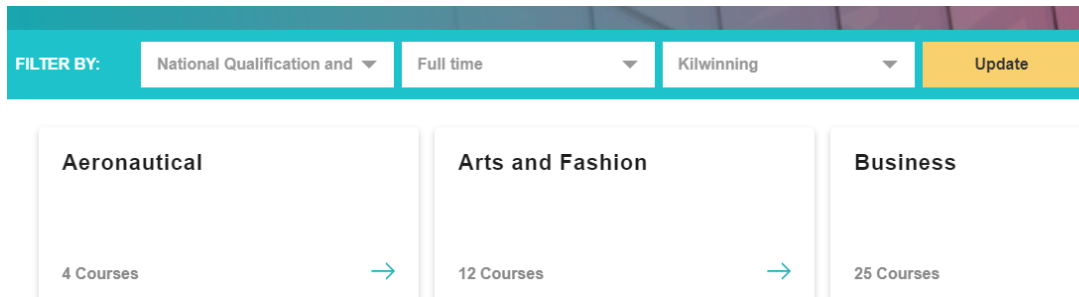

Figure 4 Screenshot shows filter search choices made only using keystrokes.

- [Excellent range of video clips](#) that
    - provide easily digested information for people with print impairments and
    - demonstrate the inclusive approach of the college (for example #ThisAyrshireGirlCan and #WhatIActuallyDo).
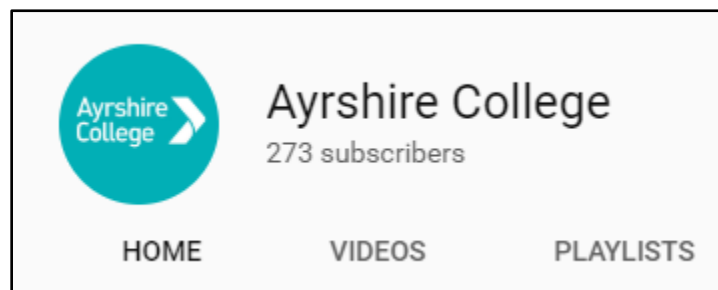

Figure 5

- Prospectus PDF pages sampled worked well with Edge browser's built in text to speech and Chrome's Selection Reader plugin but there were some issues with reading order; see What could improve – technical (below).

- Reflow generally works well on the prospectus in Adobe Reader reflow view but with occasional blips as shown below.
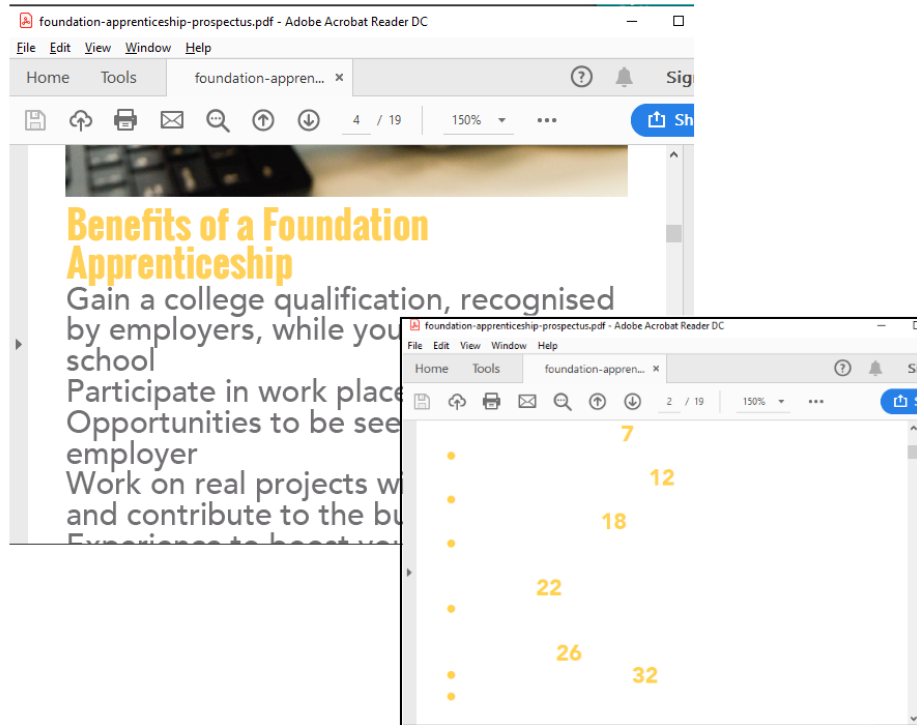
Figure 6 Screenshot shows successful magnification and reflow on the "Benefits of a foundation apprenticeship foundation" section – and indeed much of the prospectus. However, the table of contents page degraded.

Website - information and guidance

- The accessibility statement was practically focused with good information about Browsealoud as well as generic information on adapting the view of a web page.
- The Inclusive learning page was easy to find and included a breadth of information (though there were missed opportunities to provide more depth).

WHO WE SUPPORT	WHAT SUPPORT WE OFFER
Ayrshire College is committed to supporting all of our students to have a positive learning experience. We support students with:	A member of Inclusive Learning will meet with you to discuss your support needs and agree your Personal Learning Support Plan (PLSP). We also provide:
Visual Impairment	Dyslexia Screening
Hearing Impairment	Equipment Loan
Autistic Spectrum Disorder	Demonstration of Assistive Technology
Physical Disabilities	1:1 Support and Workshops
Medical Conditions	Learning Assistant Support to Read, Scribe or Note Take
Specific Learning Difficulties	Sign Language Interpreters
Unseen Disabilities	Assessment Arrangements
Mental Health	Help With Applying For Disabled Student's Allowance
Social, Emotional and Behavioural Difficulties	Liaison With Curriculum Staff
Care Experienced Students	Liaison With Curriculum Staff
Young Carers	Working in Partnership With External Agencies

Figure 7 – screenshot of key support pages showing (but not linking to) a range of possible support areas.

- An inclusive approach has been taken to assistive technologies by ensuring they appear alongside other resources such as ebooks and photocopying and emphasizing that all students are welcome to use any of these facilities.
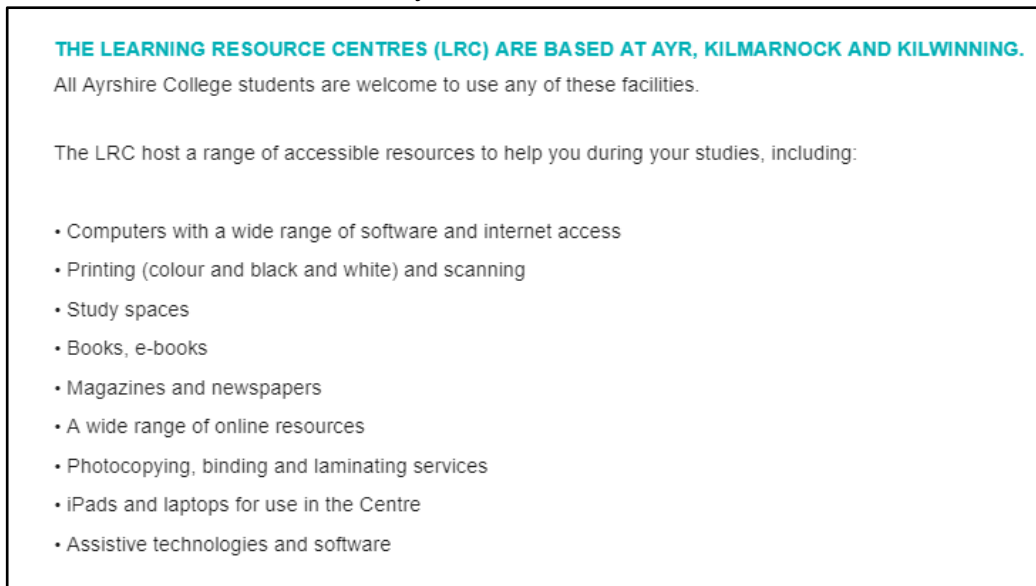

THE LEARNING RESOURCE CENTRES (LRC) ARE BASED AT AYR, KILMARNOCK AND KILWINNING.

All Ayrshire College students are welcome to use any of these facilities.

The LRC host a range of accessible resources to help you during your studies, including:

- Computers with a wide range of software and internet access
- Printing (colour and black and white) and scanning
- Study spaces
- Books, e-books
- Magazines and newspapers
- A wide range of online resources
- Photocopying, binding and laminating services
- iPads and laptops for use in the Centre
- Assistive technologies and software

Figure 8 - screenshot showing the range of accessible resources that "All Ayrshire students are welcome to use".

- [Mainstreaming Equality and equality outcomes report](#) available in alternative format with clear contact details.

If you require this report in an alternative format please call 01292 265 184 or email equalityandinclusion@ayrshire.ac.uk

Figure 9 - screenshot shows phone and email contact for alternative format of equality report.

- [Mainstreaming Equality and equality outcomes report](#) provides very detailed information – although it was (ironically) difficult for print impaired people to read due to accessibility issues (see What could improve – technical section below).

What could improve

Website - technical

- Automated testing using two different systems identifies a range of errors or issues. This was true even on simple pages like the [students association](#). There were many ARIA elements on the page. These had some issues – ARIA is usually more useful when used more sparingly – [see ARIA guidance](#). We advise asking screen reader users to test pages to ensure the ARIA elements are adding to their experience.

Figure 10 screenshot shows results from Lighthouse auditing tool (left and WebAim Wave tool (right). Contrast errors feature strongly but it is also worth checking ARIA is being used appropriately.

- Although the range and diversity of video support is excellent, they need captioning or transcripts. Even YouTube auto-captioning would be better than nothing.

Figure 11 screenshot shows two sample videos with no captions or transcripts

- Colour contrasts fail on many web pages - this appears to be a systemic problem – possibly due to choice of branding colours.
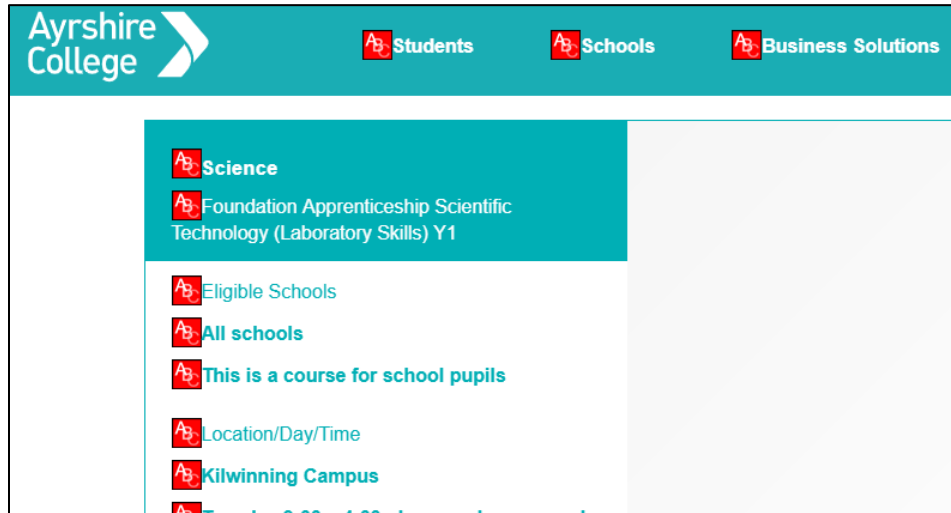

Figure 12 Screenshot shows contrast issues identified by the WebAim WAVE tool and supported by Google Lighthouse results.

- navigating the web pages by keyboard-only is a frustrating exercise because
  - there are no skip links so every time a user goes to a new page, they must tab through 22 recurring menu items in order to get to any other links on the page,
  - the tab order does not follow the visual order, making it more difficult to navigate.
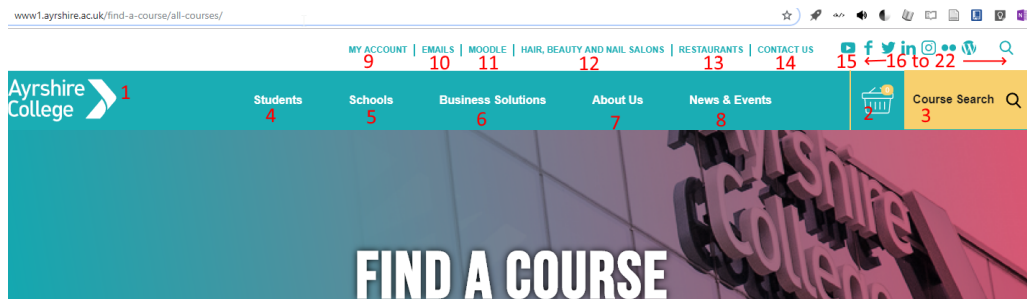

Figure 13 Screenshot of top menus of a page with the tab order superimposed as a number sequence. The priorities suggested in the visual layout are different from those offered to screen reader users.

- Tab focus is too subtle on some areas of the page - In the example below it is very difficult to tell which of the options is currently highlighted. This makes the web page very hard to use for somebody who is not a mouse user. For example, people with dyspraxia may find keyboard access a lot easier than manipulating a mouse.
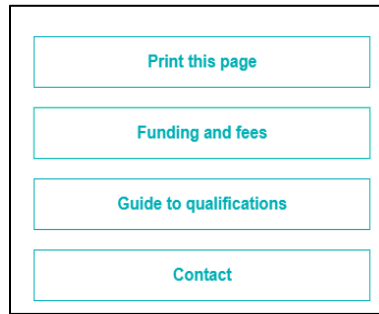
Figure 14 Screenshot shows 4 menu items, one of which is currently highlighted, but it is very hard to see which is the current highlighted link.

- There are visual headings on pages that are not tagged properly as structural headings - this takes them out of the heading structure of the page and may be confusing to those using assistive technologies to help navigate content.
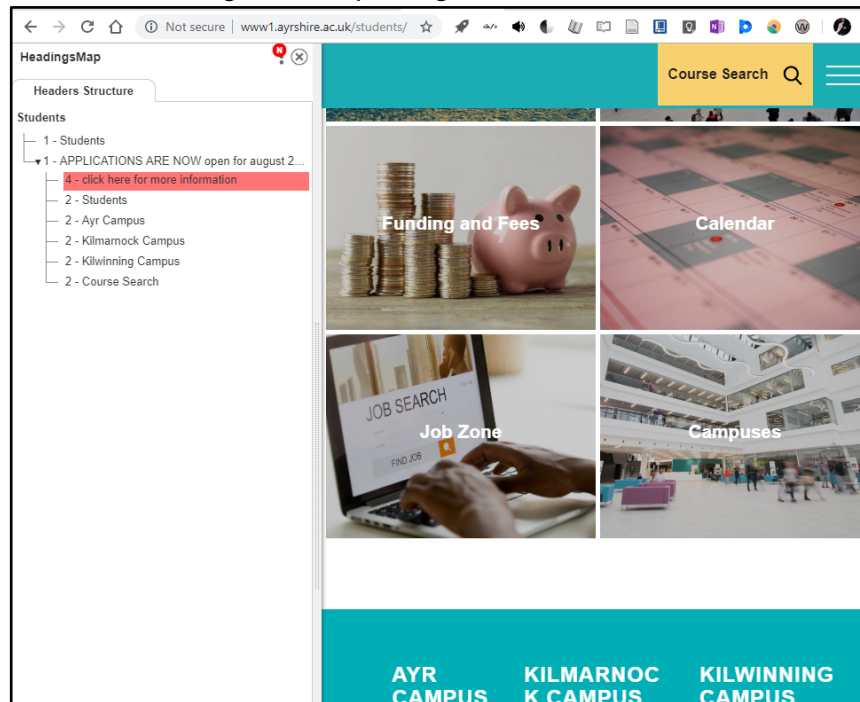

Figure 15 Screenshot shows the page structural headings that a dyslexic or blind user might use for navigation, but these are different from the visual headings on the page.

- Although the practice with link descriptions is generally good, there are a few places where non-informative link text slips through such as the examples below:
  - on the LRC page:

Please contact us if you have any queries. Our experience
resources and making the best possible use of the Centres
you may have.

For more information on our VLE (Moodle) click here.

Figure 16 Screenshot shows hyperlink labelled 'here'.

○ On the main student page

APPLICATIONS ARE NOW OPEN FOR AUGUST 2019 COURSES.

CLICK HERE FOR MORE INFORMATION

Figure 17 Screenshot labelled 'Click here for more information' but there is nothing in the link description to say what the 'information' is about.

● The Mainstreaming Equality 2015-2017 and Equality Outcomes 2017-2021 Report is a 90-page document with no navigational features such as bookmarks. This would make it very difficult for print impaired staff or students to access. The image below shows that there was a very crude level of structural navigation, but nothing detailed enough to allow users to browse through a heading hierarchy to find specific sections. Because the document has - visually and typographically - a consistent use of fonts, it should not be a difficult task to retrofit a semantic heading using the 'Select all text with similar formatting' option in Word and then applying an appropriate heading style.
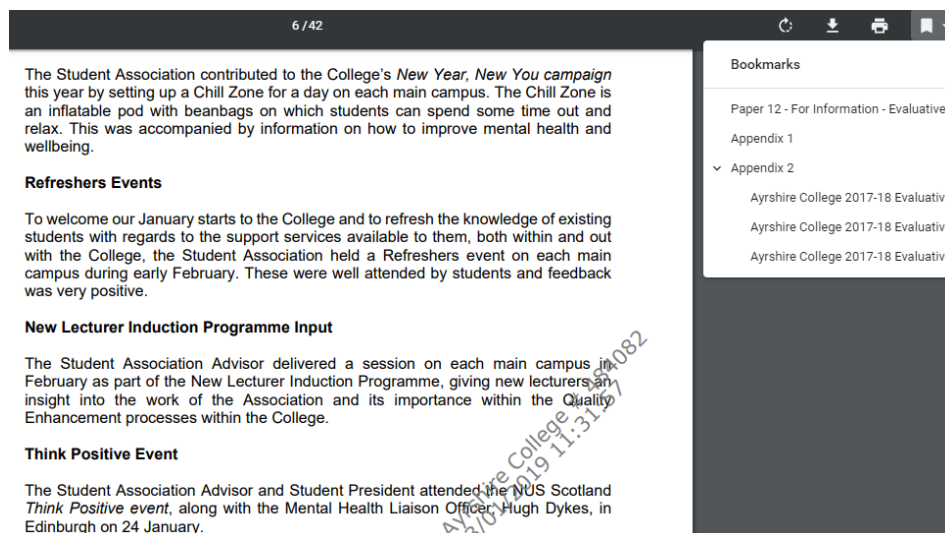

Figure 18 Screenshot shows the bookmark navigation structure is very crude with only 3 top level headings and two lower level headings. These appear almost accidental rather than planned.

● Similarly, the learning and teaching committee papers consisted of a 42-page document that was, visually, very well organised. However, the lack of bookmarks or navigation features would make it challenging for assistive technology users to navigate. The

consistent use of formatting would make it a relatively simple job to select text of a similar format and apply a semantic heading style.

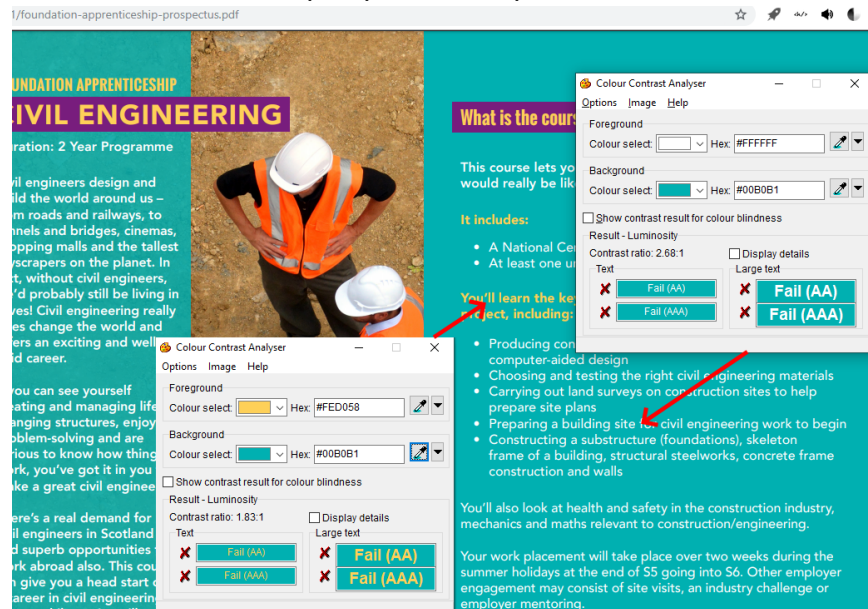- Colour contrasts failed on the prospectus sampled.

Figure 19 Screenshot shows text and background colour combinations failing web accessibility guideline contrast ratios.

- Reading order in the prospectus has some odd quirks that could confuse people using text to speech or screenreaders.
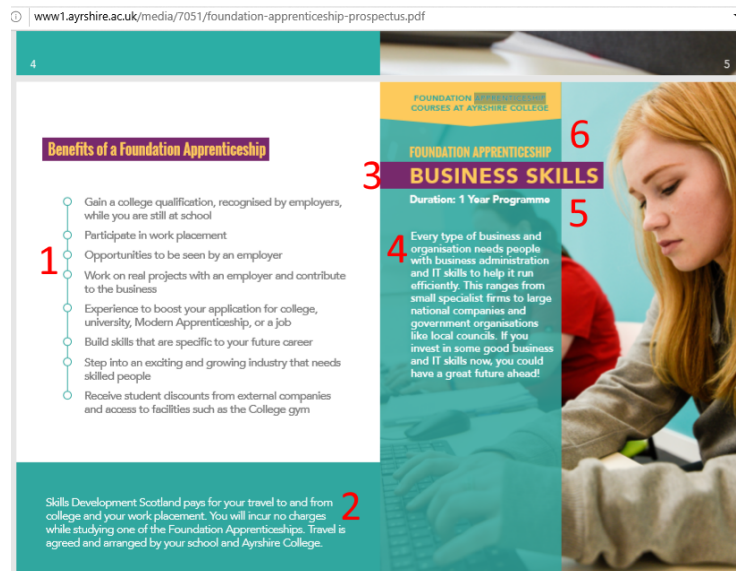

Figure 20 Screenshot shows the sequence read out by Adobe Reader's inbuilt text to speech tool. This could be confusing to those relying on text to speech or screenreaders.

- There were no obvious navigation features in the prospectus (such as bookmark view or interactive contents page). This would make it a difficult document to navigate for somebody with print impairment.

Website - information and guidance

- The Accessibility statement had good accessibility information but the accessibility of the page itself was below par with
    - an illogical heading structure that made it hard to navigate for screen reader users,
    - poor colour contrasts that could be equally difficult for dyslexic users, visually impaired users or those working with bright light on the screen,
    - a large chunk of text written in upper case. Whilst not a specific accessibility standard checkpoint, the advice recommends avoiding the use of all capitals.
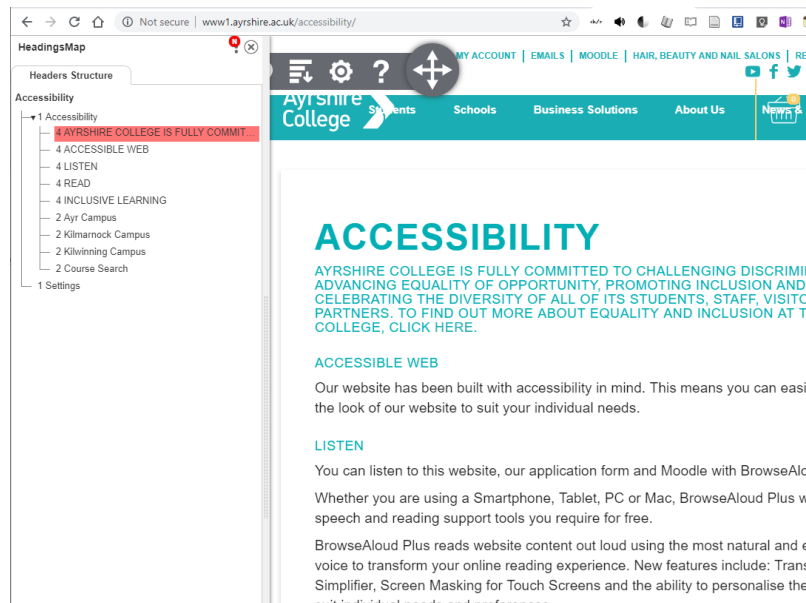

Figure 21 Screenshot shows heading levels that go from 1 to 4 and then 2. This would be difficult for a screenreader user to navigate.
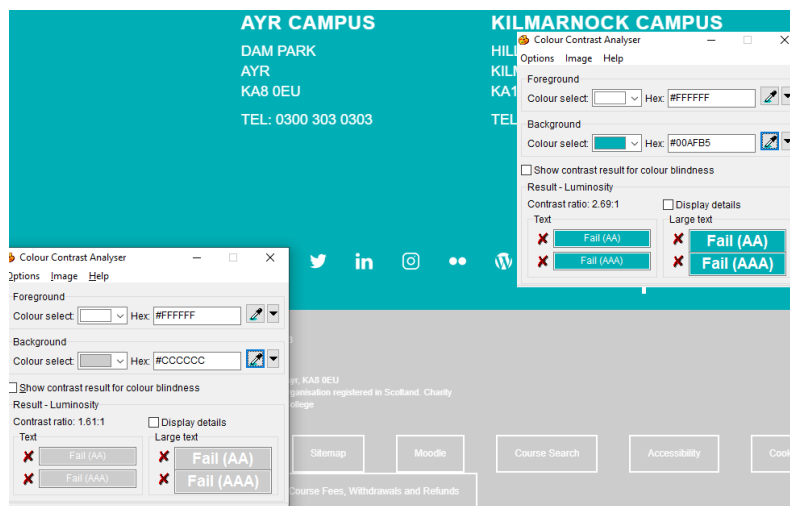

Figure 22 Screenshot shows colour contrasts failing on different elements of the accessibility page.

- Whilst Browsealoud works well on the VLE, it requires users giving permissions. Without guidance on this, some users may be anxious that they are breaching data protocol.
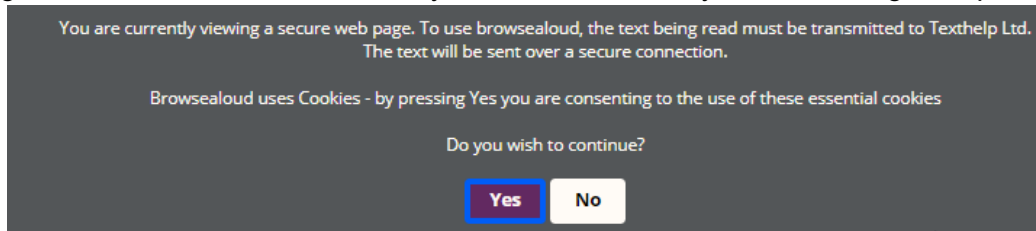

Figure 23 Screenshot shows the message alert when Browsealoud is started in the VLE. It would be helpful if students were forewarned about this being normal.

- Browsealoud gives a good audio alternative for web content but much of the content in the VLE is based on Word documents. It would be helpful to see support information referencing inbuilt text to speech in Office.
- Although the Inclusive learning page had a single line reference to assistive technologies there was no further information available that could inform student's awareness, decisions or planning. I found it impossible to find out
  - what assistive technologies the college supported for students who declared a disability
  - which – if any – were available across the institution for all users as a mainstream 'productivity tool'.
- A website search for VLE returned a single result that simply confirmed that the LRC could support with VLE issues. There was no indication as to what the VLE was, the extent to which digital content was available across different courses or the ways in which it might support inclusive teaching and learning.
- A search for ebooks returned no results, even though books in digital format can often be significantly more accessible to students with disabilities.
- The blog had an option to filter by equality and inclusion, but there were no posts matching this criterion. This creates (and then dashes) a false expectation.
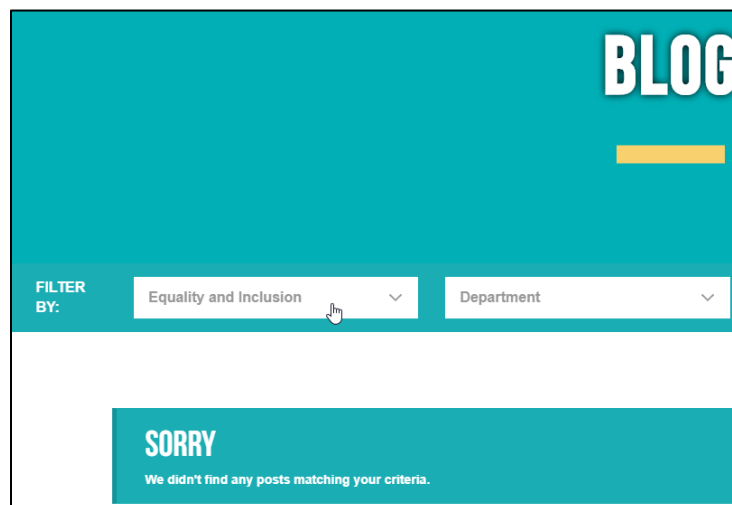

Figure 24 Screenshot shows that filtering by Equality and inclusion creates the message Sorry - we didn't find any posts matching your criteria.

- Search results were confusing because they appear to include metadata about the page types that have been returned by the search. For example, "LRC Feature Panel" Was a very unintuitive heading for a search result and could have been easily skipped over without realising it contained the key information.

INCLUSIVE LEARNING SINGLE COLUMN (1)

The Disabled Students Allowance (DSA) is designed to meet additional study needs that affect students with a l
physical impairment, Autistic Spectrum Disorder, medical condition, medical health condition, disability or other
purchase of specialist equipment and assistive software, learning assistant support for readers, scribes, etc. and
printer paper

LRC FEATURE PANEL

services • iPads and laptops for use in the Centre • Assistive technologies and software   Please contact
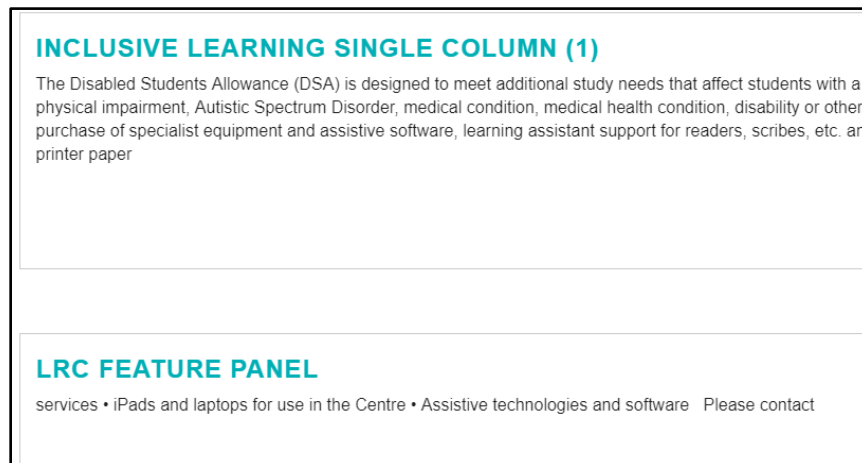
Figure 25 Screenshot shows search results including information that would be meaningless to a user - such as whether the result is on a 'Single column(1)' page or a 'Feature panel'.

- Despite being a Disability Confident Employer (according to the Equality outcomes report), I found no information on the website (other than a logo) telling me what this meant and whether there were positive implications for me as a potential student.
- Where download links were given for the prospectus, there would be value in providing guidance on how to personalise the experience. For example, opening the prospectus in the Edge browser would give the best 'inbuilt text-to-speech' experience but opening it in Adobe reader would give the best magnification, reflow and colour change experience.
- The Prospectus sampled had no information on support available for students with disabilities.