# Literature Review

This project is part of the ‘Digitally Ready’ project being run at Reading University. Digitally Ready is a JISC (Joint Information Systems Committee) funded project and will run from July 2011 to July 2013 at the university. The aim of it is *“to raise awareness and offer opportunities to staff and students at the University of Reading to develop their digital literacies to prepare them for working, learning and living in a digital society”* [[1]](#endnote-1) (Digitally Ready). Typically, digital literacy is defined as the skills, behaviors and attitudes that fit an individual for living, learning and working in a digital society. The aim of the UROP project is to look at digital literacy and the Digitally Ready project in terms of accessibility for learners with disabilities and explore the benefits and issues that may arise. It will also focus on the current outputs from the Digitally Ready project and whether any modifications should be made to ensure that they are more accessible to those with disabilities.

The idea of digital literacy is a concept that has developed over the past 20 years or so and as a result of this there is still some ambiguity over the definition of this term. Doug Belshaw discusses this with regard to the history of digital literacy in this thesis[[2]](#endnote-2) and tells us how the term has changed over the years evolving from other concepts and how the meaning has changed with it. This begs the question can it really be considered the same term that has evolved with various meanings or were there similar ideas and concepts relating to the skills sets required at the time. If so then we cannot truly define digital literacy as it is constantly changing and evolving with our society and its digital requirements.

There is also some debate over what elements make up digital literacy. Can digital literacy be considered in the same category and traditional ICT? Doug Belshaw explores this in an article for the Guardian; *“The digital world is not a single, homogenous space and, as a result, the literacies we require to traverse and interact in this space vary enormously. This does not make for an easy, one-size-fits-all knowledge transfer approach but it certainly recognises the diverse world in which we live, both online and offline”[[3]](#endnote-3)*  Digital literacy has developed over the past few years and is continually developing to keep up with the digital and social demands that society impose; and as a result of this it becomes increasingly difficult to define a specific set of software related skills that individuals require to be considered ‘digitally literate’. Instead the skills are considered to be more generic and focused upon not the actual skills required to use a piece of software or a website, but the ‘skills’ required to be able to find out how to use new technologies and the way individuals learn these. Steve Wheeler explores this idea in a blog post, *“Literacy is therefore more than a skill. It is the capability to be able to interpret meaning within context… Literacies of this kind are acquired as the learner engages with the culture, mediated through the tools… Many of these literacies are learnt serendipitously - through encountering problems and solving them while using digital tools”[[4]](#endnote-4)*

There are very few models relating to digital literacy of those that exist they seem to have similar themes. In his TED talk[[5]](#endnote-5) Doug Belshaw outlines and explains his model for digital literacy, ‘The eight essential elements of digital literacies’. As the title suggests he has identified eight key elements that are involved in learning and using digital literacies. Doug’s eight elements aren’t directly focused on the functional skills of using a computer or software, they focus on the way people learn and use digital literacies in general. This helps to demonstrate what digital literacy is about and is a good foundation for those learning new digital literacies; it encourages them not to just focus on the specific skill that they wish to learn but gets them thinking about how they learn and what other abilities they will use to develop them. It is this attitude and mentality that enables individuals to become digitally literate and capable. Another model used by Future Lab[[6]](#endnote-6) is similar to Doug’s and works on the principle of eight components. Both models share some of the same eight components/elements and even though some aren’t ‘labeled’ the same the ideas behind them are very similar.

The other area this report will look at is disabilities in relation to digital literacy. There are a variety of disabilities all with different needs and requirements. JISC TechDis[[7]](#endnote-7) lists the majority of them and gives some detail into what each ‘group’ may require. The TechDis site has grouped the disabilities into ten groups, such as ‘Users who have difficulty hearing’ this has enabled them to make recommendations for specific groups of disabilities in relation to learning and technology. They also have an extensive list of assistive technologies that may benefit users with disabilities. From looking at the information that they have provided it is clear that the range of disabilities is broad and so are their requirements; what works for some individual may not for others or may potentially make things less accessible for them. As a result of this it is key that digital medias, skills and literacies are available to everyone in some way and that individuals are equipped with the tools (both mentally and also physically) so that they may learn what works best for them and enables them to develop their digital skills.

An article from Disability Dynamics[[8]](#endnote-8) looks at the digital divide and its impact on those with disabilities. The document focuses on employment but a lot of the information is relevant to all of those with disabilities. It highlighted that a large number of disabled people were digitally excluded and even those who weren’t their internet usage was 25% lower and less frequent than the general population. This means that there is already a high number of disable people who aren’t digitally literate because they don’t have access to the equipment (broadband connection or computer hardware) in the first place. Also, if they are using the internet less frequently this could indicate that those that have access are lacking in the digital literacy skills required to carry out the tasks that they wish to. All of this indicates that a number of people will disabilities are missing out on vital skills, and this will impact them in various ways not only just in terms of working but also socially.

The Royal National Institute of Blind People (RNIB) outlines some adjustments[[9]](#endnote-9) that users can make to their computers to aid with the day-to-day use of them. These adjustments are primarily focused around the built in features which most operating systems provide users with, such as screen magnification, screen readers, text and resolution size and also pointer size shape and colour to name but a few. As these are all built in features they are made accessible to all users with access to a computer, this means that those with sight difficulties have at least basic access to some of the tools they require for becoming digitally literate. The website also lists various other assistive technologies for those who are blind or partially sighted, some of these are free others come at a cost; however, this doesn’t solve the issues of websites, application or other digital literacies not being compatible with these tools and this is a major issue.

The website ‘See Hear Surf’[[10]](#endnote-10) looks at web accessibility for blind and deaf users. In terms of deaf users the web is fairly accessible to them as a lot of it is based upon text, graphics and images, which they can access. The issue for deaf users is video; a lot of videos posted on the web have no transcript or subtitles and as a result the video will be of no use to them. This is becoming more of a problem with the increased use of YouTube and the integration of video on the web.

The disabilities mentioned above can be considered physical disabilities and it is more obvious what the user’s needs for these will be, but what about cognitive disabilities? A good example of this is autism. Autism is a spectrum condition, and as a result of this individuals will have different needs as it can affect them in different ways; although there are certain difficulties which may affect them all. The National Austic Society[[11]](#endnote-11) and the BBC[[12]](#endnote-12) both outline the ‘main symptoms’ that autistic individuals display, most of these are behavioral and not something that the digital literacies can make more accessible through the design (unlike for those who have sight or hearing difficulties). However, what is extremely important for those with autism is consistency; once they have learnt to use a digital literacy it can be quite upsetting and distressing for them if there are radical changes and the way they use it alters. Another key element is the content, those with autism tend to struggle with communication and often take things very literally so literacies aimed at this group need to consider their content very carefully as to whether it is appropriate or not. These aside the web and computers have been shown to make a huge difference there are various resources discussing this; one is from Dinah Murray and Wendy Lawson[[13]](#endnote-13). They discuss now computers can be used with autistic children to aid with social inclusion and also for learning and as a result of this it is important that autistic individuals are equipped with the skills they require to learn new digital literacies and be included.

An article in the guardian gives a slightly different opinion of autism and the way in which computers can be used. The article mainly focuses on the possibility of a link between those working in the IT industry and autism, but also looks at the role computers play in today’s society. *“We do need to think about the tendency in autism to become fixated on narrow activities. They may have the skills to use computers but not to know when to stop."[[14]](#endnote-14)* This quote from the article raises some interesting questions regarding the relationship between those who have autism and computers. As stated, individuals on the autism spectrum may already be equipped with the skills to be digitally literate and to a certain extend may find it much easier than others to learn new digital skills. So from this perspective do we need to make special arrangements to help these individuals to become digitally literate, if they can already do this themselves, or should we focus more on the aspect of these individuals not knowing when to stop and ensure that they are given guidance and support from this perspective to enable them to use a computer as a positive tool and not become fixated and obsessed by them.

Another example of a cognitive disability is Dyslexia. Similarly to autism individuals with dyslexia can be affected in different ways and as a result can use various assistive technologies to aid them while using a computer. The majority of asstive technology recommended is in the form of screen readers, voice recognition software and computer setting toi change the size and look of font[[15]](#endnote-15). As a result of this to ensure digital literacies are accessible for those with dyslexia materials should be treated similar to those designed for individuals with visual impairments and created to be compatible with screen readers.

# This Is Me

The University of Reading has developed the ‘This Is Me’ content informing people about digital identity (DI) and how it affects them and others perception of them. There are four This Is Me ‘booklets’ each aimed at a slightly different group, the ones I am going to focus on specifically are those for ‘people considering their careers’ and ‘university students’ as these are the most relevant to the group the ‘Digitally Ready’ project is aimed (at the students at the University of Reading). The material is available to students both online and in a physical booklet form. The content is useful for students considering their digital identity; however it does have its shortcomings.

To work out how accessible the ‘This Is Me’ website was to individuals with disabilities I ran it through various website checkers. The website took so long to run the majority of them refused to analyse it, one of the only ones that would was the FAE checker (Functional Accessibility Evaluator) provided by the University of Illinois (<http://fae.cita.uiuc.edu/>).

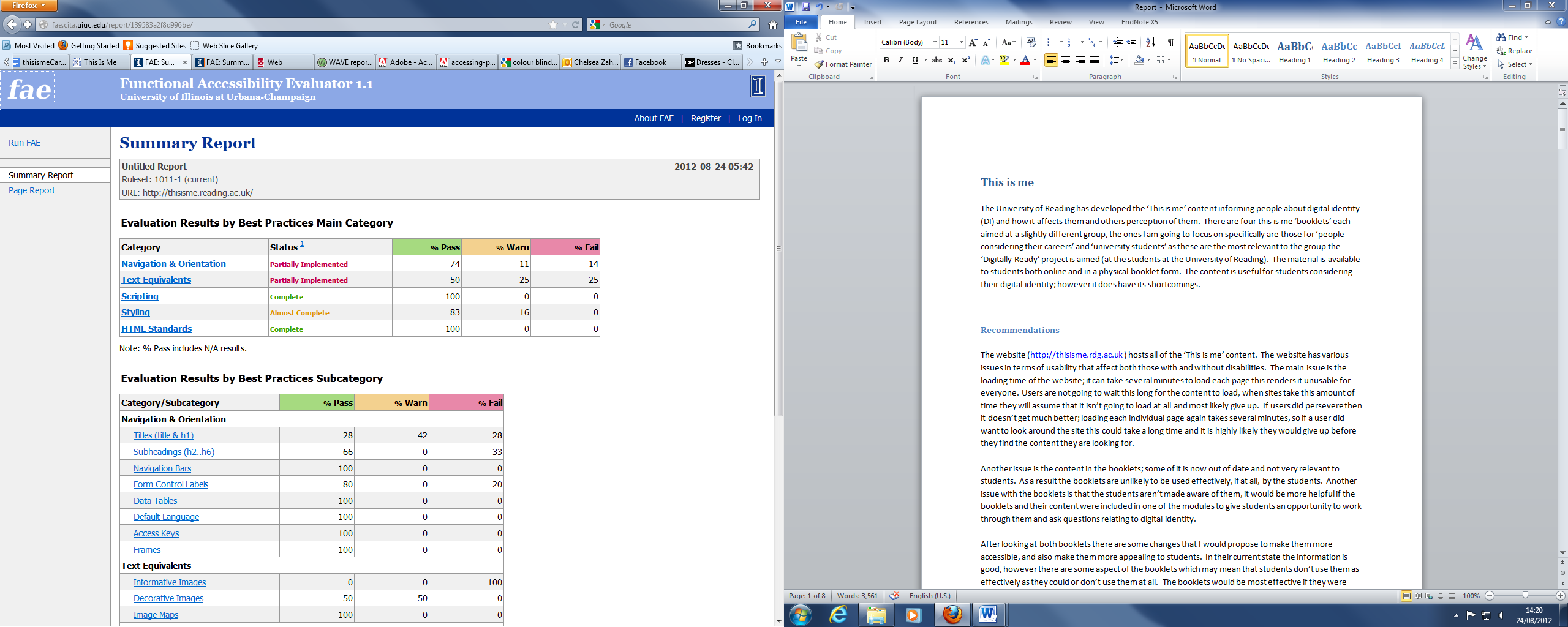


Figure1

There were various accessibility issues that the checker found, but as it has already been decided that the content will be moved, hopefully to a WordPress site, so I didn’t spend too much time looking into these.

### Recommendations

The website (<http://thisisme.rdg.ac.uk> ) hosts all of the ‘This Is Me’ content. The website has various issues in terms of usability that affect both those with and without disabilities. The main issue is the loading time of the website; it can take several minutes to load each page this renders it unusable for everyone. Users are not going to wait this long for the content to load, when sites take this amount of time they will assume that it isn’t going to load at all and most likely give up. If users did persevere then it doesn’t get much better; loading each individual page again takes several minutes, so if a user did want to look around the site this could take a long time and it is highly likely they would give up before they find the content they are looking for.

Another issue is the content in the booklets; some of it is now out of date and not very relevant to students. As a result the booklets are unlikely to be used effectively, if at all, by the students. Another issue with the booklets is that the students aren’t made aware of them, it would be more helpful if the booklets and their content were included in one of the modules to give students an opportunity to work through them and ask questions relating to digital identity.

After looking at both booklets there are some changes that I would propose to make them more accessible, and also make them more appealing to students. In their current state the information is good, however there are some aspect of the booklets which may mean that students don’t use them as effectively as they could or don’t use them at all. The booklets would be most effective if they were aimed at specific groups, I would suggest one for first year university students and then another for second and third years. The reason for the spilt is that second and third year students are more likely to be considering their careers whether it is an industrial placement or graduate job and as a result it will be useful for them to have information relating to their digital identity and employment; whereas first year students aren’t going to be as focused on these things and therefore a booklet looking more generally at digital identity will be more relevant for them.

The recommendations below are from looking at the ‘This Is Me – An introduction to Digital Identity for University Students’ and they are aimed at creating a booklet for first years. Some recommendations relate to accessibility and changes that need to be made for those with disabilities, and others are more general to make the booklet more useful for students.

The Contents page could be clearer; it would be nice if some of the sections had more meaningful titles so that those using a screen reader can decide which sections specifically they would like to look at. It may also be useful if some of the information was grouped together, for example a section focusing on social networking, rather than having the information spread out throughout the booklet.

A key issue is that there is no Alt text for any of the images in the booklet or the ‘This Is Me’ website. This is a major issue for those with slight impairments as when using a screen reader they will not get anything useful to tell them what the image is or what it represents; this can be major issue when images are used as example or to add context. The WebAIM website[[16]](#endnote-16) gives more information about the importance of Alt text/tags and the impact it has on screen readers, and it gives examples of what happens when suitable alternative text is not provided.

The first example used in the book is ‘Locking down you DI?’ this is a good example to use for those considering their careers as it talks about making a Facebook profile more professional but to first year students this may not seem of much importance as the majority of them will use it for socialising and may not see the relevance of the example to them.

The example used for Twitter is nice, it is something which students can relate to and the worksheet that goes along with it is good to get students thinking about those who can potentially see their tweets. In terms of Twitter it would be nice to see some more information on the ‘effect’ tweets can potentially have and making students aware that if their tweets are in the public domain then essentially anyone can see them. It would be nice to see this tied into recent news stories regarding the impact offensive tweets have had and that the police may become involved to make students aware that comments made can have serious consequences.

The ‘Smile Please’ example and worksheet are a good example as photos and videos are another aspect of an individual’s digital identity. It would be useful to see this tied in with the social networking aspect of digital identity i.e. Facebook, Twitter, YouTube, etc. and also to see it linked with the ‘DI and tags’ section as now many online services allow users to tag photos with people and locations. It would also be helpful to see a section on Facebook included within the booklet and some tips on privacy when using social networking sites.

Initially the ‘Creating a SNS profile for an internship?’ section isn’t overly clear, primarily because the term ‘SNS’ (Social Networking Site) isn’t explained. A brief explanation is needed and some examples of what is included by the term would be useful for the reader.

The next section is on ‘Closed Communities’ the idea behind this section is good, however after reading the example I am unsure if students will see this as a relevant example. Whilst a lot of student may play online games they will not be ‘role playing’ and as a result the majority of students won’t take this section seriously. To make this section more relevant and appealing to students it may be best if a different example is used.

The example from Kevin Warwick is a nice addition to the booklet, in addition to this it would be nice to see the example from him that has been used on the This Is Me website (Professor Kevin Warwick tells his DI story). This example is also relevant to Digital Identity and it shows how other peoples opinion and online content can affect an individual’s digital identity without them producing anything themselves.

As mentioned before it would be more useful if the section on ‘DI and tags’ was tired in with other elements of social networking. It would also be more useful to see reference to the fact that you can tag people in photos, locations etc. on social networking sites now and this all has an impact on an individual’s digital identity.

Before the final exercise (Worksheet 9) it would be nice to have a small conclusion to finish the booklet off, as currently it feels as though its ends very abruptly. It would also be useful to have a conclusion to summarize what has been looked at in the booklet and if there are any relevant external links with more information.

The game that is included at the end isn’t screen reader ‘friendly’ due to a lot of it being graphics and text being spilt into four quadrants on the page, and screen reader will not read this proper so those users will struggle to understand what is on the page. Another issue with the game is the instructions, they are presented in a table and as before the screen reader will read left to right and as the information isn’t designed to be read in that format it will not make a lot of sense. The instructions for this need to be looked at and redesigned so that they can easily be read by a screen reader by either editing the table or taking the information out of a table completely. Ideally the game should be taken out and provided as a separate attachment as the idea behind it is that it’s printed out and ‘played’.

The recommendations below are from looking at the ‘This Is Me – An introduction to Digital Identity for people considering their careers’ and are aimed at creating a booklet for second and third year students who are considering their careers through either an industrial placement or a graduate job. Some recommendations relate to accessibility, and others are more general to make the booklet more useful for students.

As before the Contents page could be clearer with some of the sections having more meaningful titles to aid those using a screen reader; and again grouping information to make it easier to find. Also there is the issue with images not having alternative text or captions; this is something that definitely needs to be resolved as those using a screen reader will struggle if no alternative text is provided.

The first example ‘The truth is out there – well almost!’ is possibly not the best example to use to ‘open’ the book as parts of it seem quite trivial and perhaps not relevant to careers. The opening paragraph used is nice but the beginning of the interview seems irrelevant, it’s not until the end that there is any mention of careers or employment. This example could be cut down or alternatively using a different example to open the book with may work better and be more engaging for students.

Another example that needs amending is ‘Interview with a third year student’. The example is a good apart from the paragraph that starts ‘I got stalked on Facebook in my first year…’ This paragraph seems out of place in this example and could be consider inappropriate for those with Asperger’s Syndrome or an Autism Spectrum disorder and these individuals tend to take things very literally and could associate having photos of themselves on Facebook and being stalked which generally isn’t the case.

The example ‘Seeing red over the writing on the wall’ is a really good example and shows that you don’t need to have everything visible on sites like Facebook. However it would be nice to see this example updated, Chris gave a similar talk at the ‘Digitally Ready’ day in July and talked about the use of Linkedin, Twitter and why he got rid of Facebook this was really interesting and something which is very relevant to digital identity and would be a welcome update as the current example feel out of date.

‘Changing Privacy settings, choosing services’ gives some good information but it would be nice to see this section built up and include advise about making profiles private and changing settings on who can see certain information about you.

The page on ‘Tweeting’ is nice and the example works well, but it would be nice to see it tied in with the section on ‘Tweeting: Personal, Professional or just Life?’ As the two are obviously related and it makes it easier if the information is grouped together. It would also be useful to see information included on the ‘dangers’ of sites like Twitter as once something is out there in the public domain then it is very hard to remove entirely.

The ‘Closed communities – private community/public impact’ section is the same as in the previous booklet and the concerns about whether students will take this seriously are still the same, especially for older students. This example may need to be looked at and changed to make it seem relevant and appeal to students.

A general recommendation for this booklet is to look at Linkedin as a social networking site for those considering their careers as this can be an extremely useful tool if individuals utilize it, and can act as a good addition to their CV. It is also worth mentioning for those going on or who have been on placement Linkedin is an excellent way of maintaining professional contacts without adding them to other sites such as Facebook or Twitter.

# Digitally Ready Blog

To work out how accessible the Digitally Ready blog was to individuals with disabilities I ran it through various website checkers. The all seems to return very similar results, the one of the websites which was the easiest to understand was the FAE checker (Functional Accessibility Evaluator) provided by the University of Illinois (<http://fae.cita.uiuc.edu/>).

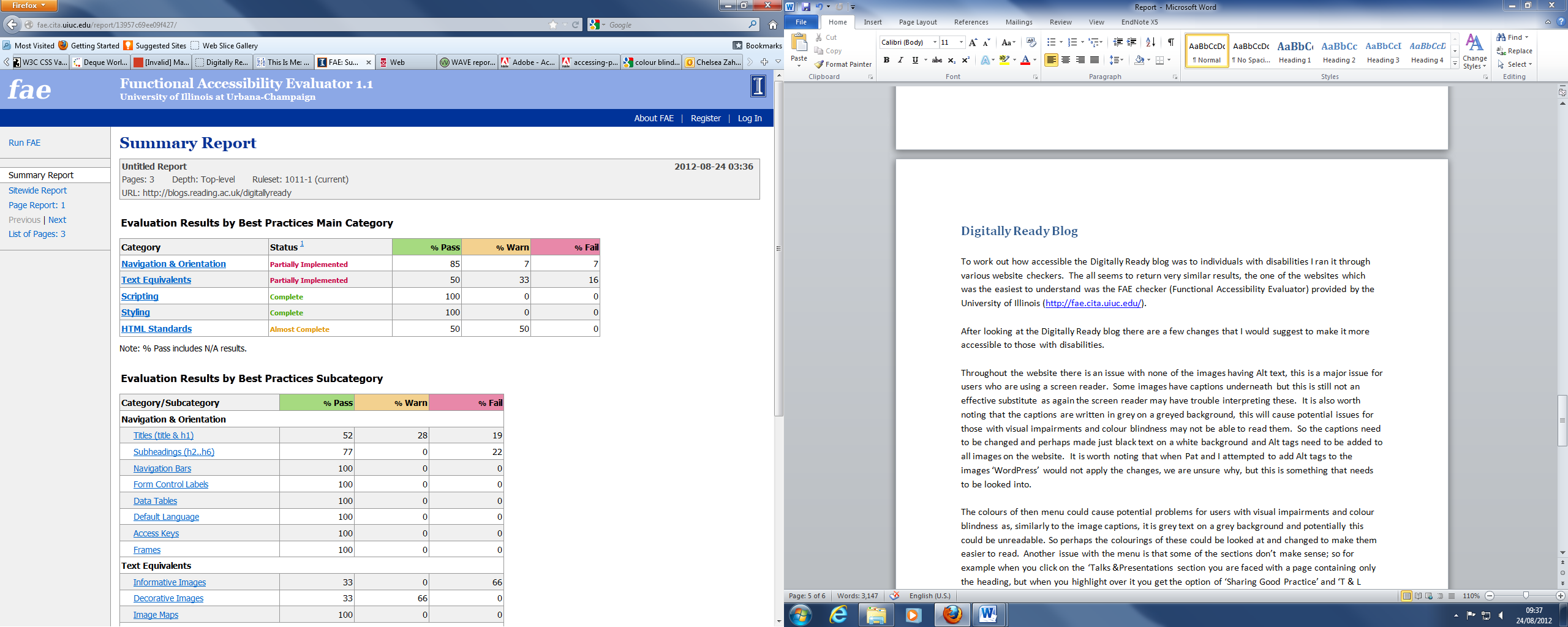


Figure 1.1

The screen shot above (figure 1.1) shows the main results when the digitally ready blog (<http://blogs.reading.ac.uk/digitallyready/>) is run through the accessibility checker, as you can see it has identified three main areas where there are issues, Navigation & Orientation, Text Equivalents and HTML Standards.

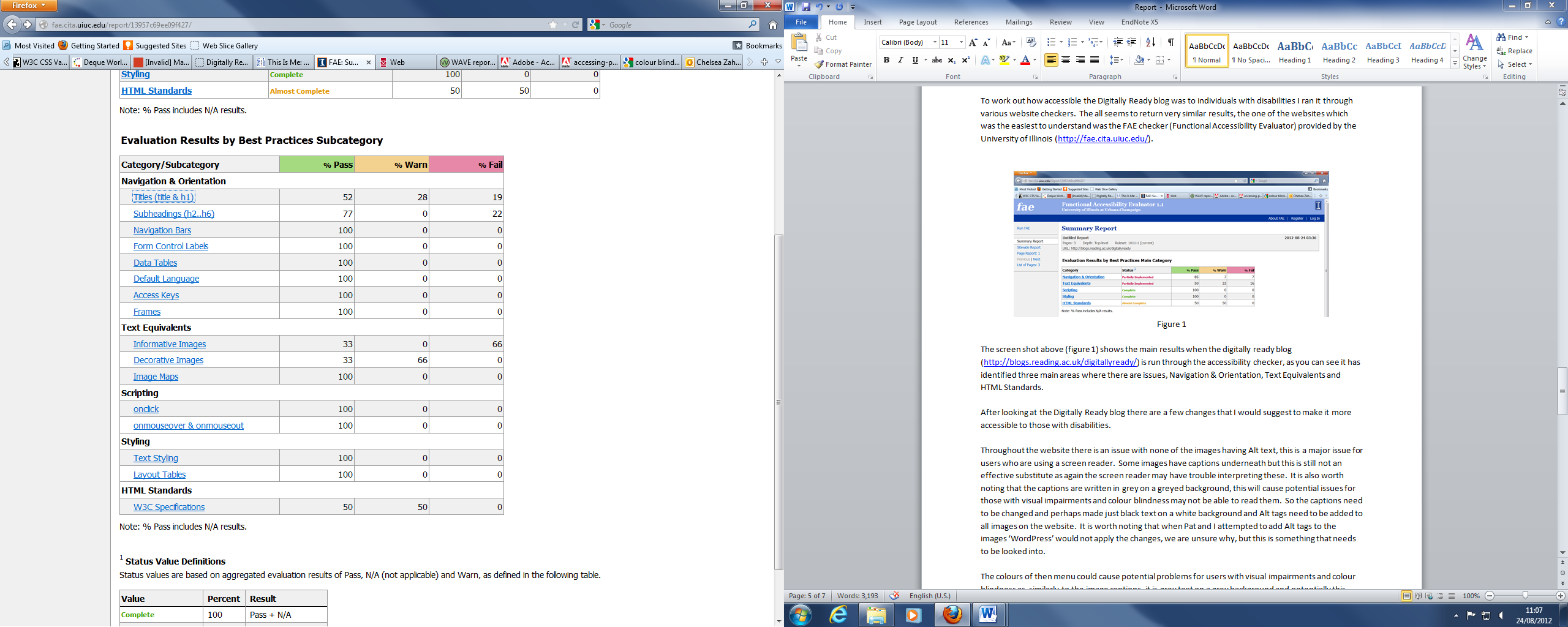


Figure 1.2

If we firstly look at the Navigation & Orientation category the issues here both sit in the Titles and Subheadings category, obviously this could cause potential issues for those using screen readers. After looking more closely at the results all of the ‘fails’ are occurring due to the embedding YouTube video, this is something which shouldn’t cause too much of an issue as the video doesn’t auto redirect off of the site and this isn’t an issue with the blog directly. This isn’t an issue with the blog this is an issue with YouTube and as a result there isn’t much that can be done to resolve this, as a result of this we can assume that if it wasn’t for the video then the blog would have passed this section with no errors.

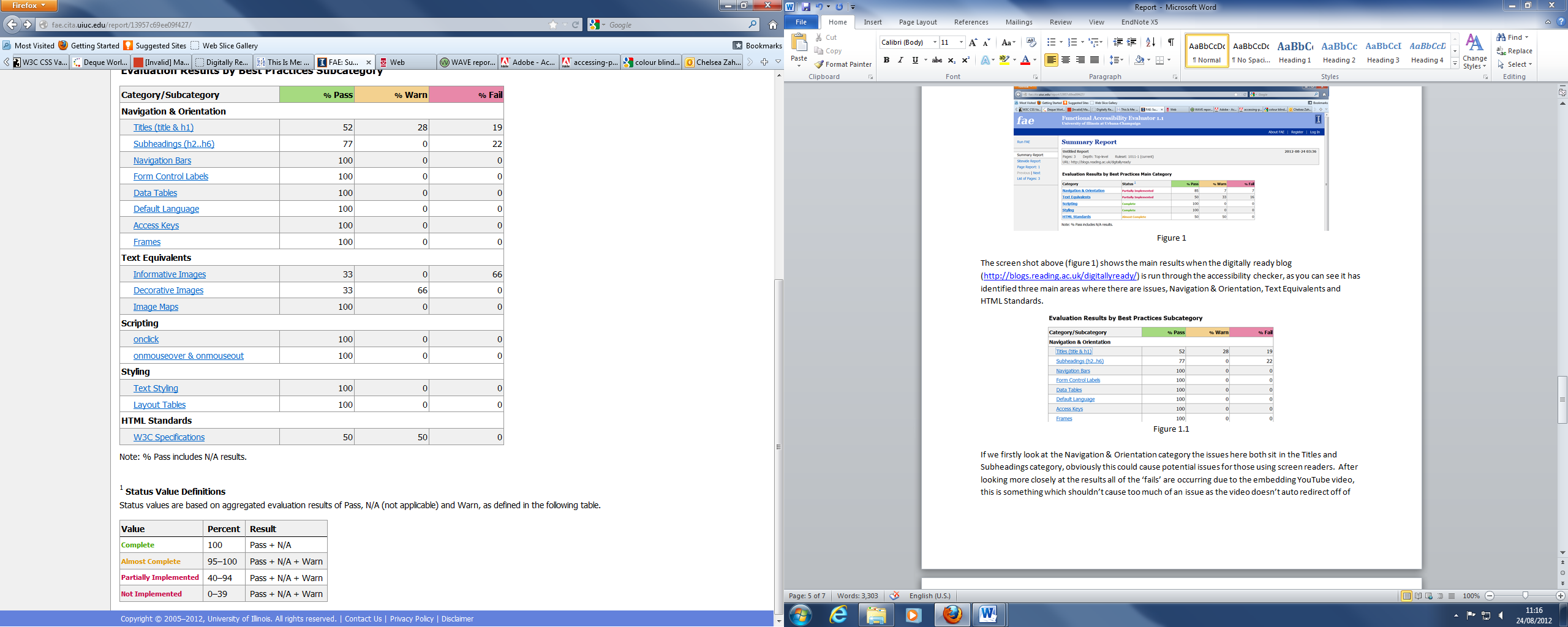


Figure 1.3

The second section where there were issues was Text Equivalents, interestingly all of the issues here again relate to the YouTube video’s that are imbedded in some of the blog posts. Perhaps a caption or alternative text attached to this is needed but other than that there isn’t a lot that can be done. It is worth noting that when the checker was run a few weeks ago there were issues with all of the images on the blog, but recently captions have been added underneath them and this seems to have resolved the issues, although it would still be useful to have alternative text ‘attached’ to each image rather than just relying on the caption below.

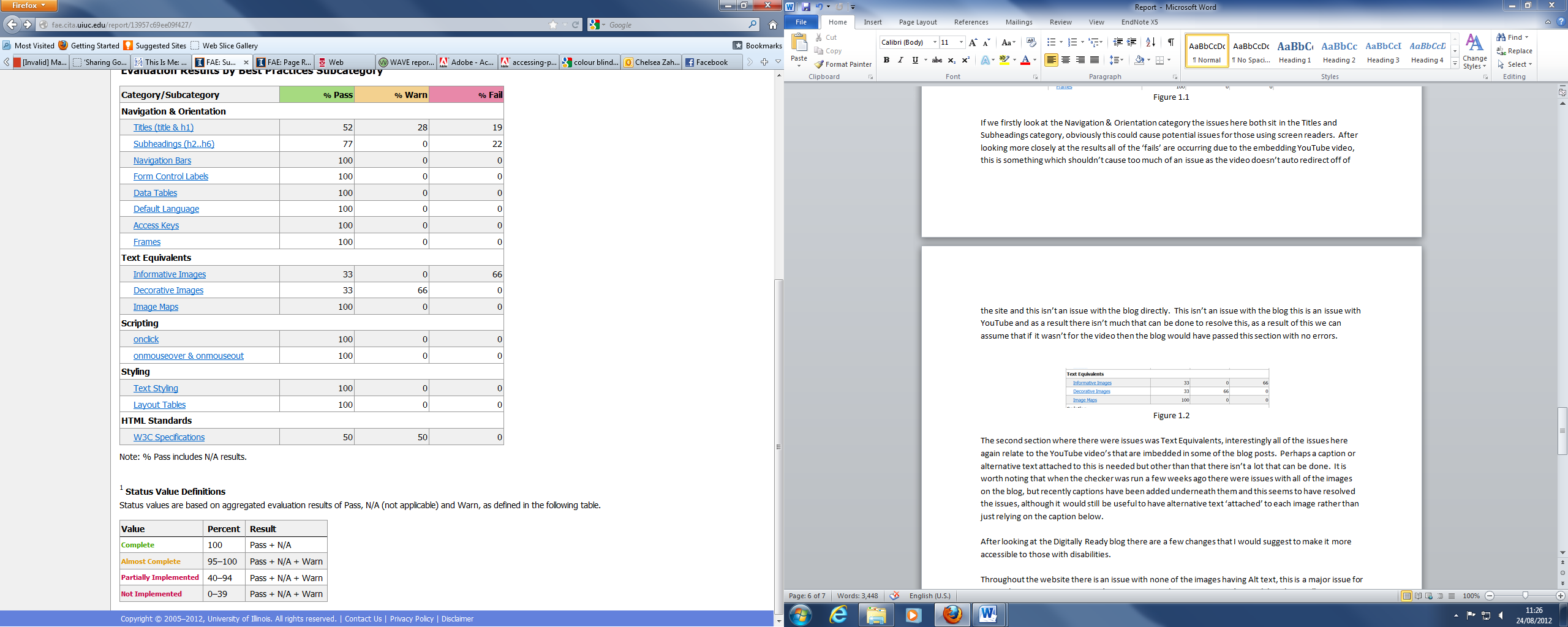


Figure1.4

The final section that had issues was HTML Standards, these were ‘warnings’ rather than fails and as a result they are not immediate issues but things to be aware of. The warnings relate to some images having no Alt tags, which is something we are aware of as is being looked into as there were issues with apply the Alt tags in the WordPress editor.

After going through the results of the accessibility checker there don’t appear to be any major issues that relate directly to the blog, and therefore users with disabilities shouldn’t have issues with accessing the majority of the content on the site.

### Recommendations

After running the accessibility checker I have looked at the Digitally Ready blog there are still a few changes that I would suggest to make it more accessible to those with disabilities.

Throughout the website there is an issue with none of the images having Alt text, this is a major issue for users who are using a screen reader. Some images have captions underneath but this is still not an effective substitute as again the screen reader may have trouble interpreting these. It is also worth noting that the captions are written in grey on a greyed background, this will cause potential issues for those with visual impairments and colour blindness may not be able to read them. So the captions need to be changed and perhaps made just black text on a white background and Alt tags need to be added to all images on the website. It is worth noting that when Pat and I attempted to add Alt tags to the images ‘WordPress’ would not apply the changes, we are unsure why, but this is something that needs to be looked into.

The colours of the menu could cause potential problems for users with visual impairments and colour blindness as, similarly to the image captions, it is grey text on a grey background and potentially this could be unreadable. So perhaps the colourings of these could be looked at and changed to make them easier to read. Another issue with the menu is that some of the sections don’t make sense; so for example when you click on the ‘Talks &Presentations section you are faced with a page containing only the heading, but when you highlight over it you get the option of ‘Sharing Good Practice’ and ‘T & L Showcase’. To make it easier to navigate it would be helpful to have links to these pages on the ‘Talks and Presentations’ page rather than nothing as users could well assume that there is no content linked with that section.

The ‘Resources’ menu gives the users a link to the ‘This Is Me’ booklet (in Google doc format) for those considering their careers, which is useful but would be nice to see all of the booklets made available as this is much more accessible than the ‘This Is Me’ site. After going through the booklet that is on Google Docs I would recommend that the formatting is looked at and amended. Each section has a number beside it but these aren’t all aligned properly throughout the document and this could cause some confusion for those using a screen reader. There are also several blank pages which again can cause issues for those using a screen reader and also make the booklet appear incomplete, so these need to be removed.

The ‘Digital Heroes’ section links to two PDF’s with text, initially there was a concern that these wouldn’t work with a screen reader. However after looking into it and testing, it appears that these should be compatible with most screen readers. The only thing to bear in mind is to ensure that PDF’s like these are ‘tagged’ before the PDF is finalized and uploaded, tagging the image tells the screen readers where new sections begin and in what order they are designed to be read. PDF’s that aren’t tagged become more difficult for those using screen readers to access as it has to ‘guess’ where the tags would have been placed[[17]](#endnote-17). Ensuring PDF’s are tagged also needs to be considered in the Documentation section as all of the documentation available there has been uploaded in PDF form. The majority of it shouldn’t cause an issues as the documents are mostly text but, issues may arise when tables and diagrams are used.

There is potential for accessibility issues with a lot of the content that has been uploaded in the ‘Sharing Good Practice’ and T&L Showcase’ sections. As before all of the materials in these sections seem to open up as PDF’s so there is the issue of if they have been tagged, especially as some of the presentations don’t have a ‘conventional’ layout, for example the presentation on ‘Virtual Rome’ . Also some of the presentations use brightly coloured backgrounds and text this could cause an issue for users with visual impairments or colour blindness as they may not be able to read them clearly or at all and as far as I can tell there is no way of changing the colours in the PDF to make them more accessible for the users. Another issue with a lot of this material is the use of images, some are used to add context or give examples to the text on a slide, and others are used to demonstrate an example alongside no text. Again this will cause a major issue for those using screen readers especially the slides where the whole thing is an image or screen shot with no explanation or alternative text. These need to be looked at and perhaps made available to users in a PowerPoint format (as most of them are slide shows) so that they can overcome some of these issues by changing the background or text colour if they need to.

There doesn’t appear to be a sitemap for the Digitally Ready blog, this is something that may make a useful addition to allow users to find which they are looking for and browse the website more easily then navigating the menu system at the top of the screen.

# Digitally Ready Booklet

The Digitally Ready Booklet is still ‘work in progress’ and as a results I have analysed and critiqued the most recent version that I have been given. Some of the recommendations below are aimed at making the materials more accessible for those who have disabilities, others are just ‘general’ comments to make them easier to use for everyone.

The booklet would benefit from a contents page; at the moment there isn’t one and it’s already at twelve pages with more to be added. Those using a screen reader would find the content much more accessible with a contents page as this would allow them to quickly access whichever sections they wanted without have to go through the whole booklet. A contents page would also make it easier for other users as again they can find sections quickly. Also the pages need to be numbered, those using a screen reader will find it very difficult to access certain pages if they are not numbered and will need to go through all of the heading till they find what they were specifically looking for.

As with the ‘This Is Me’ booklets, the images in this one don’t have useful captions/alternative text. The captions that are there are just for referencing purposes, those using a screen reader will find it very difficult to work out what some of the images are and what their purpose in the document is.

The sections in the book where examples are used need to be labeled up more clearly; as currently it’s not obvious that some of the content is supposed to be used as an example and this may confuse the reader.

# Review

During my six week placement I have had the opportunity to research into both digital literacies and accessibility, neither of which I knew a lot about to begin with. As I started looking at the digital literacy and what it meant I would say that I considered myself to be completely digitally literate; however as the weeks went on my view on this changed. I realized I wasn’t quite as literate as I initially thought, I struggled to work out how to use the referencing settings within Word so began to search on the internet for help. Once I’d got the hang of it I pleased, but then when I moved between Word on Windows and OSX I struggled as they didn’t work in the same way and I felt as though I was back at the beginning trying to work out how to use it. This really got me thinking about whether I was digitally literate or not, as I didn’t just know how to do something which realistically wasn’t very difficult, but I did know how to find out how to do it. After a lot of thinking and more research I came to the conclusion that I can consider myself to be fairly digitally literate as even though I don’t know how to use a lot of software brilliantly I do know how to effectively browse the internet to find out how to do things.

I also learnt about new technologies, such as accessibility evaluation sites, and how to utilize existing ones, such as the referencing features is MS Word. Both of these I learnt mainly through following online tutorials but also through a small amount of trial and error. In order to be able to learn these new skills I needed to have a certain amount of digital literacies already learnt to enable me to search effectively to find what I was looking for, those with disabilities shouldn’t struggle with this if, like me, they already had the basic skills; however the issues that they may encounter may be that the sources they need to use to learn from may not be as accessible in terms of their web design and/or content. The aspect of moving between two different operating systems may have been more of a challenge for those with disabilities as the two systems work quite differently and if they were unfamiliar with either it is likely that this would cause more of an issue for them.

As part of my literature review I had to decide what sources provided me with ‘valid’ opinions and views, this was something that I initially found difficult as there was so much information available to me and all of it seemed relevant. To begin with I started by mostly looking at information from sources which I knew would be fairly accurate, such as the Digitally Ready Blog, Disability charities and organisations, work by authors which had been recommend to me, etc. Once I had done all of this I had a good knowledge of the areas that I was researching and I was able to use my judgment to see if information I came across seemed relevant.

Over the last six weeks I have spent working on my UROP I have spent a lot of time analyzing and critiquing work that has been carried out by others. Initially this was fairly difficult as I wasn’t sure what to look for, but once I’d done more specific and detailed research into the areas of digital literacies and disabilities it became easier. After doing the research I found critiquing the resources I’d been given much easier as I knew what to look for. Another thing that I found difficult was recognizing that my ideas were ‘valid’ this took me a week or two to get into the mindset and have confidence that my ideas were good and useful, this was helped by encouragement from Rachel and Pat! I also used my literature review and other research to decide if my own views were ‘valid’, if there was evidence to back them up then this was a good indicator that I was going along the right lines.

Another element that was difficult was narrowing down my research to focus on just one area as both topics are fairly broad. This was useful though as it taught me to be specific and after doing some general research I had to pick certain topics to focus on and learn more about. This is a useful skill I have started to develop and this will help me going into my final year when researching for my project.

If I was to do this project again I would keep my project plan updated and try harder to stick to it; as I didn’t do that this time it meant there were points where I was unsure what to do next and how to move forward on my project and as result of this wasted some time working out what to do.

Another thing that I would change is that I would focus on a wider range of disabilities, currently I don’t feel like a looked at a broad enough range and this is something that needed to be done in more detail. Part of this was due to the fact that I didn’t follow my plan and lost time.

I would also try to talk to more people about my project and get their opinions and advice, that was quite difficult this time due to people being busy or on holiday but if I was to do this again I would try to contact people at the beginning to try and get some time with them to discuss the project.

## Future Work

* Research into a broader range of disabilities
* Re-writing the This Is Me booklets
* Research into other aspects of digital literacies
* More detailed analysis of the Digitally Ready projects and its outputs

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