



DEFINING ANIMATION TERMINOLOGY WITH BSL USERS

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INTRODUCTION

I like to be defined as a Pracademic; splitting my time teaching & delivering Animation classes as a part-time Lecturer at Edinburgh Napier University; with the rest of my time focused upon: Storyboards, Writing for Animation and IP (Intellectual Property) Development – on a freelance & studio basis. I find this process helps inform students of potential local industry trends and learn from my past experiences, both positive & negative.

My own personal interest with British Sign Language (BSL) and the deaf community, lies principally with my experience of growing up with a partially (single sided) deaf father. My take away from my experience with my father, was developing the mantra that 'communication is key for understanding and developing relationships'. I believe this has transferred and informed upon my teaching practice, especially when it comes to discussing equal opportunities and reasonable adjustment for the delivery of animation.



“Tell me and I forget, teach me and I may remember, involve me and I learn.”

Benjamin Franklin | Xun Kuang

1. KEYWORDS

- **BSL** – British Sign Language, is the **first or preferred language** of over 87,000 Deaf people in the UK for whom English may be a second or third language. [British Deaf Association, Accessed 11/2020]
 - BSL is a visual-gestural language with a distinctive grammar using handshapes, facial expressions, gestures and body language to convey meaning.
 - BSL has many **regional dialects**. Certain signs may not be understood immediately, or not understood at all, in other parts of the country.
 - ***Please note: there are other groups that use sign language & lip reading to help make sense of the world, for example: I have serve Dyslexia with a processing challenge, and use lip reading techniques.***
- **BSL (Scotland) Act 2015** - came into force in October 2015. It **promotes the use of BSL in Scotland**, primarily by requiring certain authorities to develop BSL plans that outline how they will promote and raise awareness of the language. [Scottish Government, (<https://www.gov.scot/policies/languages/british-sign-language/>)]
- **ENU** – Edinburgh Napier University.

*BSL as a first language

- Many have suggested '**just provide more English closed captions on videos**', however this depends on BSL users having a strong understanding of English – which can be their second language.
 - *How is your French or Mandarin? Would you feel comfortable learning a subject or new skill in your second language? Can you say the majority would feel similar?*
- **Total number of BSL [British Sign Language] users in the UK estimated around 151,000 people [BDA].**
- **With 87,000 Deaf people in the UK using BSL as their first or preferred language and English being a second or third language [BDA]**
 - This also does not take into account, BSL users who may be dyslexic or have some other learning challenge. Which may make learning a second language more difficult.
- **Without a relevant BSL sign & explanation there is a gap in understanding**
 - By providing an explanation of Animation/Games terminology, making it available and easily accessible for everyone. This gives wider inclusion and opportunity to learn, regardless of age.

2. OBSERVATION OF METHODOLOGY

Within the 3D MODELLING practical sessions. I eventually found that the BSL student felt comfortable enough communicating with me; via my very limited BSL, lip reading and her use of English, on a one-to-one basis to help clarify points. During one such session, the BSL student ask me to demonstrate a specific element within the 3D software, three times in succession. I was happy to comply to ensure she understood the mechanism and the point of the session. I witnessed a very unique methodology that I did not expect nor observe prior.

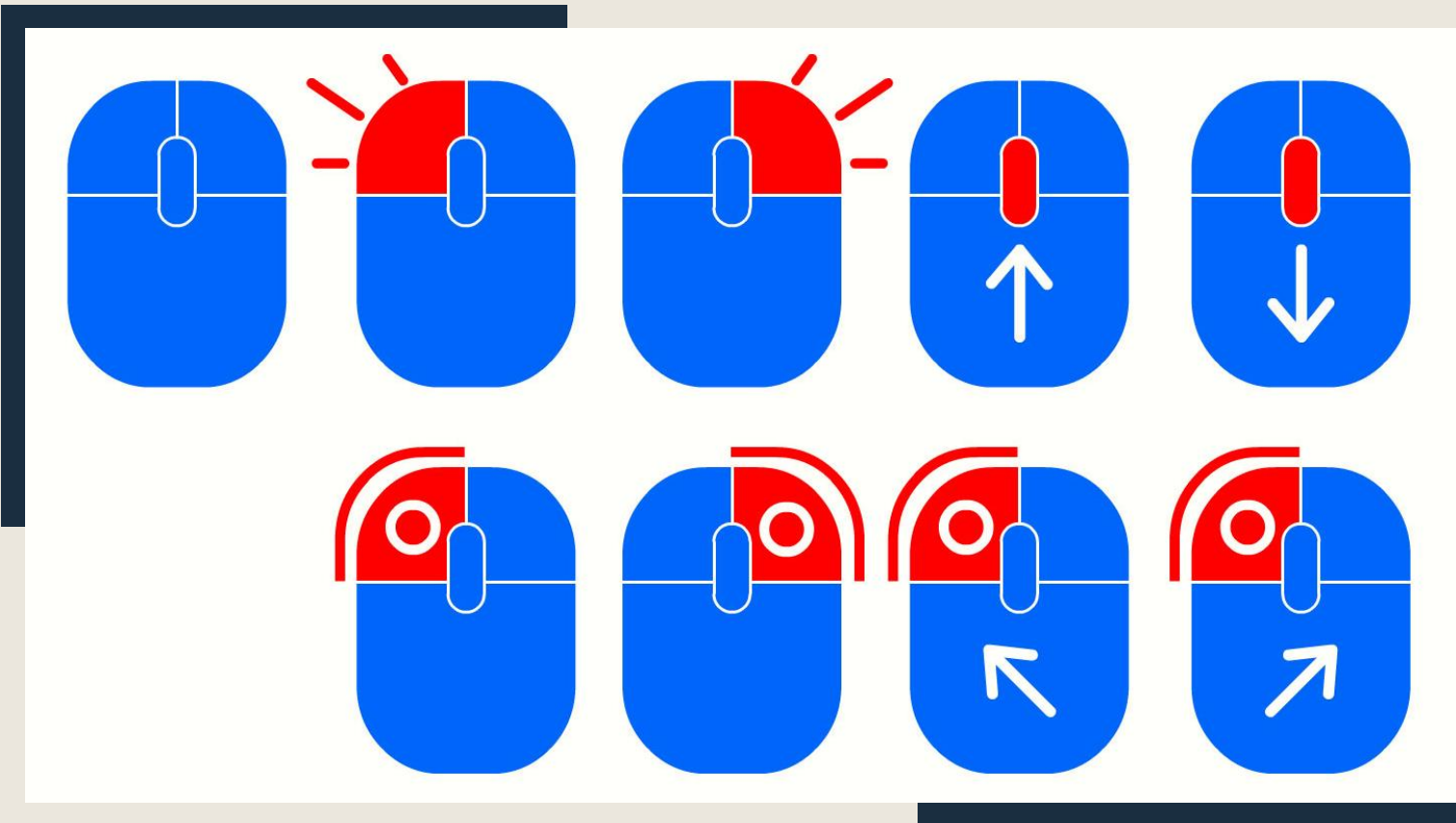
**Below is an example of a single BSL student's methodology for coping with learning 3D software.*

1. LIP READING	2. ON-SCREEN DEMO	3. MOUSE + KEYBOARD
First presentation: Reading the lecturer/demonstrator's lips to get instructions for the task and goal to achieve.	Second presentation: Observe what is occurring on screen, what tools within the 3D interface are being used and how they utilised to complete the goal.	Third presentation: Observe what the lecturer/demonstrator is doing with the keyboard (shortcuts) and mouse clicks (Windows - left/right).

- This observation of my BSL student methodology was conducted in a classroom setting and pre-Covid-19 restrictions.
 - *I am unsure if I would have witnessed this methodology working remotely.*

3. INITIAL RESPONSE

I wanted to devise short term and longer solutions to help support the BSL student her in her studies. One short term solution, was to experiment with computer mouse icons that could either; be printed and used by the student to seek clarification from delivery staff or/ to be integrate into teaching tools/notes.



COMPUTER MOUSE GRAPHIC ICONS.

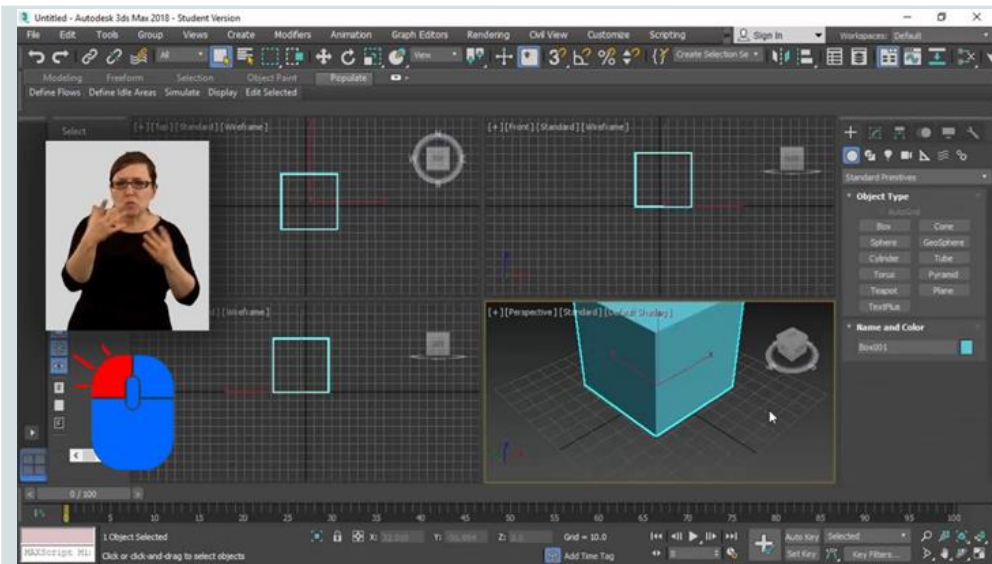
*Please contact me if you would like to use/ experiment with these icons and I can send you the vector graphics file.

*All I ask is you give credit and let me know how you get on.

4. THE ORIGINAL HYPOTHESIS

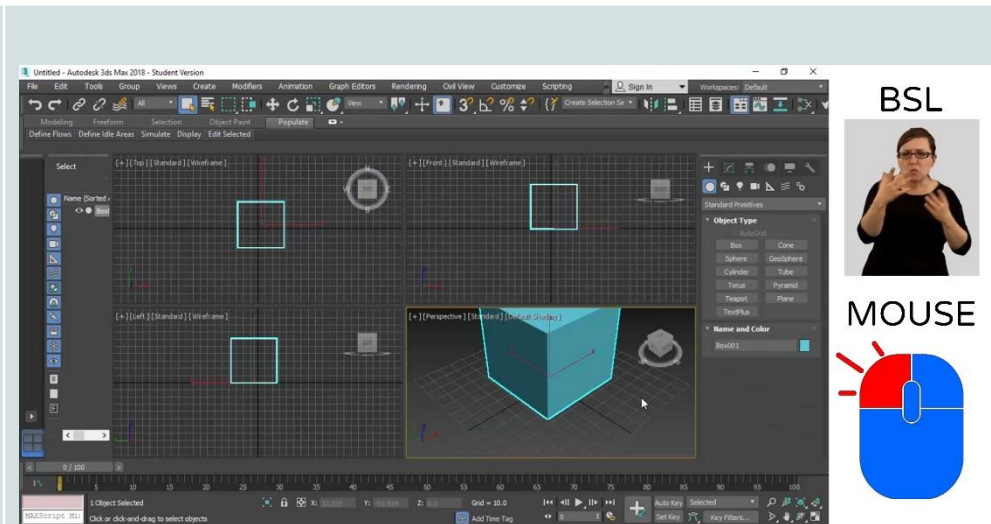
To experiment with a longer term approach, I wanted to develop an initial BSL-friendly 3D Animation tutorial. To support and encourage BSL users to explore the Animation/Games sector as a possible career.

PROPOSED LAYOUT 1



- Overlaying an BSL interpreter & computer mouse icons on top of the 3D interface (with closed captions)
- Danger of covering up or obscuring the interface

PROPOSED LAYOUT 2



- Separating the different elements of the layout so it does not obscure the interface
- Danger of squashing everything in to a single screen

5. PUBLIC ENGAGEMENT FUND

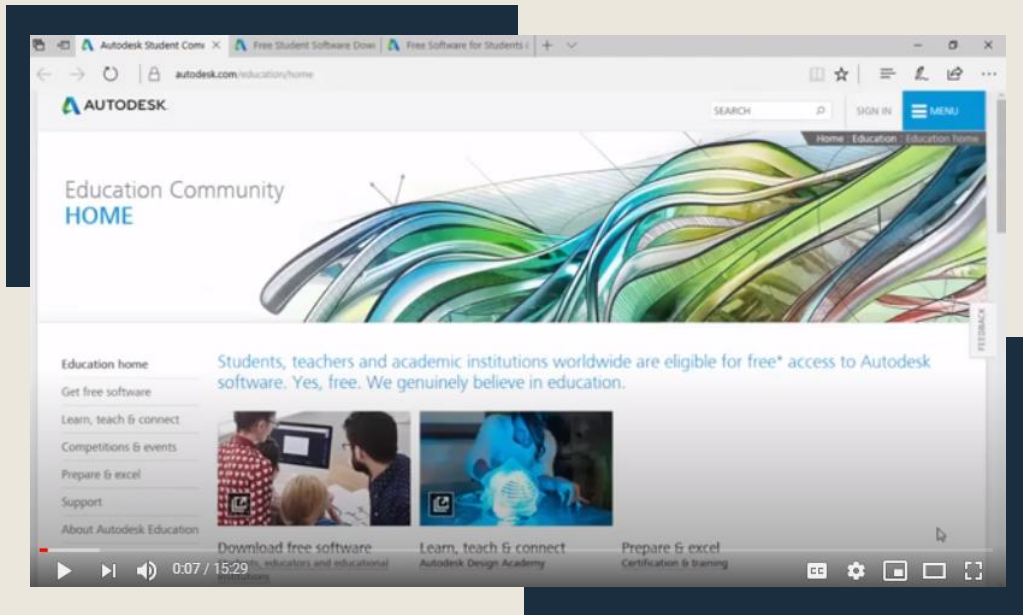
In March 2020, my proposed project [BSL friendly animation tutorial] was awarded £1500 of the ENU - Public Engagement Fund. With the key criterion for funding being that the proposed activity will creatively engage the public with your research. (<https://www.napier.ac.uk/research-and-innovation/public-engagement>)

- With my contract not including research, I would be undertaking this project in my own time.



6. INTENDED APPROACH

With allocated funding from ENU's Public Engagement Fund, to pay for specific services such as BSL Interpreters; this allowed me to select one of my 3D Animation video tutorials to be translated as a proof of concept. As well as giving me the opportunity to organise BSL user focus group – with a BSL interpreter present.



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Supported by Just Sign

<http://www.justsign.co.uk/>

With funding in place and with positive feedback on the project from local & national BSL groups.

- What could possibly go wrong?

RESEARCH CHALLENGES

- On the 23RD MARCH 2020, the UK entered a Lockdown in reaction to the Covid-19 global pandemic.
- “Quaranteenie”, my son was born at the end of April – during phase 1 of lockdown. He was planned, the pandemic was not.
- Any funds awarded from the Public Engagement fund, must be spent by 31 July 2020 or will be forfeit.

7. THE REVELATION

Over-coming the Covid-19 restrictions while being empathic to other circumstances, I was unable to follow my original timeline and expectation, but I did formulate a Plan B to work remotely.

A – FOCUS GROUP	B – VIDEO TUTORIAL
REMOTE ONE-TO-ONE SESSIONS W/ JUST SIGN Ltd.	REMOTE CONSULTANTATION WITH JUST SIGN Ltd.
<ul style="list-style-type: none">• <i>A SMALL FOCUS GROUP FORMED, WHO HAVE AN INTEREST IN ANIMATION. PARTICIPATES WERE INVITED TO JOIN VIA SOCIAL MEDIA – WHICH WAS RECOMMENDED APPROACH TO ENGAGE WITH THE DEAF COMMUNITY [JUST SIGN]</i>• <i>THEY HIGHLIGHTED THAT EITHER OF THE PROPOSED ‘BSL FRIENDLY’ TUTORIAL LAYOUT, WOULD BE CONFUSING TO BSL USERS.</i>• <i>ISSUE SURROUNDING SPECIFIC ANIMATION TERMINOLGY</i>	<ul style="list-style-type: none">• WE USED MY INTRODUCTORY TUTORIAL TO THE 3D INTERFACE [15 MINS] AS THE SAMPLE. IF SUCCESSFUL, THIS WOULD BE MADE AVAILABLE TO THE WIDER PUBLIC.• DURING JUST SIGNS EXAMINATION OF THE VIDEO TO BE INTERPRETED, THEY IDENTIFIED SEVERAL WORDS THAT DO NOT HAVE AN EQUALIVANT BSL SIGN.• HIGHLIGHTED BSL GLOSSARYS WHICH ACT AS VISUAL SIGNING DICTIOINARIES.

8. NEW BSL SIGNS FOR ANIMATION

Just Sign Ltd. Worked with one of their BSL interpreters who is a native BSL user, to propose new BSL signs (with explanation) for the specific animation terminology – potential catalyst of a BSL animation glossary.

- [PROCESS] Just Sign identifies words – Jon provides an explanation – Just Sign proposes the new BSL sign.

No.	Animation term	BSL New sign link	BSL Explanation link
1	Uniform Scale	https://www.youtube.com/watch?v=73IA4lirPRY&feature=emb_title	https://www.youtube.com/watch?v=9sV0WR3orKY&feature=emb_title
2	Torus	https://www.youtube.com/watch?v=C8uPp6T3lko&feature=emb_title	https://www.youtube.com/watch?v=z0so5OgDN2Y&feature=emb_title
3	Steering cube	https://www.youtube.com/watch?v=1Gjz-15RAqc&feature=emb_title	https://www.youtube.com/watch?v=dzmXFnGzM5s&feature=emb_title
4	Standard Primitives	https://www.youtube.com/watch?v=CykAk9tlpHI&feature=emb_title	https://www.youtube.com/watch?v=8mlUAyIJNg0&feature=emb_title
5	Splash Screen	https://www.youtube.com/watch?v=HJeQ8b8R8w4&feature=emb_title	https://www.youtube.com/watch?v=uyzRla68y0M&feature=emb_title
6	Plane [mathematical]	https://www.youtube.com/watch?v=noScSir9b8U&feature=emb_title	https://www.youtube.com/watch?v=wEfSellseWY&feature=emb_title
7	Geometry	https://www.youtube.com/watch?v=Dnyvx8-2nUk&feature=emb_title	https://www.youtube.com/watch?v=efPWzcdwP_o&feature=emb_title

9. TERMINOLOGY TEXT EXAMPLE

To help illustrate, an extreme example of the importance of animation terminology in education and to simulate what a BSL user/student would encounter in the class, please see example below, which replaces the word 'Geometry' (from one of the word identified in the previous slide) with 'waffle'.

Edited text to visualise issue	Extract from original text
<p>Learning 3D - Part I: Simple waffle</p> <p>We know a square is a 2D object - those two dimensions being the length and the width. A cube is a 3D object because, with the length and the width, a dimension of depth is added.</p> <p>A face is a 2D waffle. Since a 2D waffle can be a triangle, a square, or a polygon, a 3D model is a combination of one or several 2D or 3D waffles.</p>	<p>Learning 3D - Part I: Simple geometry</p> <p>We know a square is a 2D object - those two dimensions being the length and the width. A cube is a 3D object because, with the length and the width, a dimension of depth is added.</p> <p>A face is a 2D geometry. Since a 2D geometry can be a triangle, a square, or a polygon, a 3D model is a combination of one or several 2D or 3D geometries.</p>

10. IMPACT ON 3D MODULES

Since undertaking research & development focused toward Animation terminology for BSL users, I now include a BSL note tab in all of my Module class sites – currently there are seven new signs with explanation listed.

Edinburgh Napier UNIVERSITY

STUDENT LINKS ▾ STAFF LINKS ▾ LIBRARY

Jonathan Mortimer

IMD09145 2020-1 TR1 001

- Participants
- Grades
- IMD09145 - 3D Modelling (20 Credit)
- Module info
- Timetable
- Assessment
- Working from home / New to 3D
- BSL notes**

IMD09145 - 3D Modelling (20 Credit)

*Previous student final submission for this module.

BSL notes

As part of my funded research (Public Engagement Fund) I worked with BSL interpreters and BSL users to start highlighting animation specific words that were not known to be translated into BSL and offered a 'first pass' at interpreting a new sign. Please see the links below for the first few signs, any feedback or suggestions are most welcome.

Below is the list of words (with meaning), and its BSL proposed translation.

- Uniform Scale

Sign:

Uniform scale

11. BSL HONOURS

With the fore mentioned BSL student successfully completing her third year of her Digital Media degree - during the height of uncertainty of the Covid-19 restrictions. She elected to continue her studies onto her Honours (4th) year at ENU. As far as I am lead to believe, she will be the first BSL student to move onto her honours year at ENU.

- This of course means there will be numerous discussions with the BSL student in regards to reasonable adjustment within the delivery criteria of her honours project. Reviewing and evaluating other Universities polices and how they might apply to Digital Media. It is important to remember this process of reasonable adjustment discussion, can only be done with the engagement of all parties.
- Points of particular interest for reasonable adjustment:
 - *Scoping document / Literature review – recorded video alternative*
 - *Referencing – BSL alternative & written requirements*



12. BSL HONOURS - EMAILS

- A point of concern, was ensuring that key information was communicated to the BSL student. With English being her second language and long emails being daunting for her. I experimented with recording BSL video messages, sending an unlisted YouTube link to the student. Positive and quicker response to this method.

HONOURS COMMUNICATION #1



<https://www.youtube.com/watch?v=RYYe2VSvE2Y&feature=youtu.be> [Runtime: 24secs]

HONOURS COMMUNICATION #2



<https://www.youtube.com/watch?v=oW5ZqtHiEYo&feature=youtu.be> [Runtime: 39secs]

13. BSL HONOURS – MESSAGE PROCESS

1. PREPARE	2. RESEARCH	3. PRACTICE	4. RECORD
<p>WRITE NOTES OF WHAT YOU WOULD LIKE TO SAY IN YOUR MESSAGE:</p> <ul style="list-style-type: none">• Key points• Keep it short and to your point/s• Be mindful of the difference of sentence structure [English/BSL]	<p>LOOK UP THE BSL SIGNS TO BE USED IN YOUR MESSAGE:</p> <p><i>*There can be more than one sign for a word.</i></p> <p>[RESOURCES]</p> <p>1). YouTube https://www.youtube.com/</p> <p>2). British Sign Language Dictionary https://www.signbsl.com/</p>	<p>TAKE NOTE / DRAW YOUR SIGNS AND START PRACTICING:</p> <p><i>*It took myself 20 minutes of practice to sign a 20 second video, with no formal training for BSL.</i></p> <p><i>*See this as developing a useful skill that could make all the difference to a student.</i></p>	<p>RECORD IT AND UPLOAD IT TO YOUTUBE:</p> <ul style="list-style-type: none">• I used my smart phone to record & upload the video to YouTube – It was an unlisted link.• Depending on internet connection, pretty quick upload time.

14. CONCLUSION

- Currently, it is unknown how many words or terms, which could relate to the Animation/VFX & Games sectors, are not accompanied with a BSL sign and explanation. For this reason, it could be argued this gives a massive disadvantage to BSL users wanting to explore the fore mentioned sectors and continue their studies.
- A national initiative is required to deal with the scope.
- A BSL video glossary for Animation (& Games) could be implemented through a collaboration on institutes, industry groups & charities, and uploaded to YouTube – as a bespoke YouTube Channel. I would propose this approach would allow all BSL users, of any age, to have free access to the proposed Animation Glossary. Making it transferable regardless of tutorial source.
- We need to explore more options of CPD (Continuous Personal Development) training focused toward BSL; which could be guiding lectures/instructors on understanding basic BSL or working towards Level 1 BSL certification – institution could partner up with local charities / sensory centres.
 - *Why can't we have a dedicated member of our delivery team or department that is BSL trained, similar to a First Aider?*

15. WHAT DO I WANT?

We need your help & support. We need industry to engage with education to further a two-step approach to raise awareness and better inform the general public on this topic;

1). An illustrated video (infographic) explaining the situation in a two-minute video.

- Applied to ENU Public Engagement Fund to employ with two graduates in order to assist me creating the illustrated video.
- Draft proposal and script available on request.
- Can you help share the video once complete? Are you able to offer feedback & advice to the interns?
- Do any of your staff have this shared experience – and would be happy to share their thoughts?

2). Work with the Scottish Sensory Centre to develop a BSL Glossary for Animation & Games

- Letter of support from the Scottish Sensory Centre attached in the next slide.
- Sources of funding to support a national initiative.
- This topic will not disappear. There will be further discussions into how to encourage more diversity & inclusion.

THANK YOU FOR HAVING ME

I HOPE YOU FOUND THIS PRESENTATION INFORMATIVE AND HELPFUL. I AM HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE AND YOU ARE WELCOME TO CONTACT ME TO FUTURE DISCUSS THIS TOPIC AT: J.MORTIMER@NAPIER.AC.UK

I AM AVAILABLE ON: SKYPE / GOOGLE HANGOUT / ZOOM