

Memo: Importance of material

Code: Differentiating if elemental or not

Code: Needing more time to create Schwelldruck graphic

If something is important, the use of time-intensive formats like swell print is justified (high cost but also high benefits)

If it is irrelevant, it can be left out (high cost, low benefits)

Doing a cost-benefit analysis

Memo: Add-on

Code: Making documents accessible when need is there

Code: Not making documents accessible per se

Accessibility is an afterthought (not considered by the original creators of the documents)

Students have to ask for something to be made accessible to them

(Maybe adding to the feeling of standing out when asking for such adjustments?)

This also goes against the concept of centering access!

Of course, prioritising the accessibility of all documents from the start takes a lot of time and effort (could be supported with automation?)

But it is done at vocational training centres

Memo: Adjusting to how sighted people work

Using the same language

Wanting to understand graphical notation

Important for communication

Memo: Independence

Code: Not wanting to make life harder than it already is

Code: Seeing support as a work simplification

There seems to be a diversity of opinions on how much independence is desirable but also on whether to seek out assistance.

Independence also seems to be linked to other goals. For example, the interviewee describes the reasons behind blind people choosing academic institutions based on the existence of professional support, e.g. a centre for BLV students. While the existence of such support was a reason for him to choose his alma mater, he makes it clear that other people do the exact opposite. As an explanation, he mentions not wanting to stand out. This is interesting because it hints at another motivation beyond simply wanting to be independent. Rather, it shows how receiving support (or rather: receiving a certain kind of support) is noticeable by the blind student or others in an environment made up of and made for sighted people.

As Sara Hendren says, "all technology is assistive" but only some technologies are recognised as assistive (the ones used primarily by disabled people) - just like all students receive some form of assistance during their studies, in the form of tutorials and study groups, but only some assistance is clearly recognised (the one used primarily by disabled students)?

Independence also seems to be contextual.

The same interviewee mentions how he would like to be able to create and understand models independently in the workplace. The interviewee says that not having to hand over diagrams to an assistant for them to be translated would save time.

(This could also be linked to pressure from colleagues to work faster or not wanting to be perceived as less competent because of one's disability or maybe it is frustration to have those long waiting times - more information is needed to really understand this motivation)

Example of a "social factor"

Acceptance of support is mentioned because it makes life easier.

Memo: Time

Code: Not having time to wait at work

Code: Having diagrams translated takes time

Time seems to be an important theme as well.

It takes time to wait for the assistance to translate inaccessible materials.

Requiring assistance also requires making time for communication.

It takes time to sequentially perceive graphics.

(It will always take more time than perceiving everything at once?)

Time measured in comparison to how much time it supposedly takes a sighted person to do the same task?

Needing less time

(Needing not more time than sighted people?)

Can this even be solved technologically?

Maybe there needs to be more acceptance in the workplace that it takes some people longer to do something

BLV employees could get access to models in time so that they have time to prepare, e.g., before a meeting

Time needs to be taken into account when a tool does automatic translation from one format into another (it should save time! Erroneous translations would also take time to fix)

But automatic translation can also save time?

Memo: Adjusting

Code: Majority of people using a tool to draw graphics

Code: Needing a team adjusting to blind co-worker

Several situations when both BLV and sighted people adjust appear in the interviews.

Professors adjust the exam conditions (but not lecture materials?), they have to because of access arrangements?

Hypothetically, the interviewees talk about:

- sighted people using format languages in the workplace
- professors using format languages in their classes

Then, we can also discover (not as prominently displayed and not worded in this way) instances where BLV people adjust

- Learning graphical symbols that might not make sense to one
- Wanting to create graphical models

BLV people have to adjust in an environment where their ways of perceiving the world is not (always/often) accommodated, where they are the minority

Can technology support adjustment or make adjustment unnecessary (switching between different views)?

There might always be the need to adjust to each other (easier communication), get familiar with the format another person uses (textual, graphical)

But that should not only be the responsibility of BLV person

Memo: Graphical

Code: Wanting to create graphical output from Excel

Code: Being able to check output while creating

Code: Wanting to create result that looks like diagram

Difference between creating graphically and creating graphical output (but in another format, e.g., with textual syntax)

To communicate with sighted co-worker, professor, ...

Graphical format is the norm (standard)

Having understanding of graphical format seems to be important

But is it also necessary that one needs to create using a graphical format? (Much harder than just understanding it)

When creating graphical output that one cannot perceive, it is hard to correct or check it for errors (tools that transform between formats should have low error rate or there should be opportunity to check the output as a dynamic tactile diagram)

Memo: Mainstream tool

Code: Wanting access to something already in use

Code: Not liking special solutions

There are benefits: lower costs, more and also long-term support (people who develop tool further, not just a research project, less likely to be abandoned), maybe also higher employability (using tools that are "recognised" in the workplace)

Also one would not stand out, easier to work with others

Memo: Same or different format?

Code: Being able to compile and have same output as sighted people

Interesting question: should BLV and sighted people use the same format?

Not important as long as easy switch and collaboration is possible?

An interviewee mentioned the need for a format than BLV people can access which will allow them to compile what they created into a format sighted people work with (a graphical format)

Tool should also allow sighted people who use a graphical format into a format BLV people can access (not one-sided!)

Memo: Only part of the diagram

Code: Seeing keeping track in diagram as a problem

Interviewee mentioned that blind and low vision people have the same problem (sighted people who use a textual format, for example, have the same problem?)

When using a textual description / format language, one can only perceive a small part of the diagram at once. When using a screen magnifier, one can only perceive a small part of the diagram at once.

Why is that problematic?

- Hard to keep track
- Takes longer (time, again)

Does having to scroll (action) add to problem?