

Disabled students and synchronous communication tools in a VLE

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Use of Virtual Learning Environments (VLEs) can be adapted and extended to allow a more inclusive learning and teaching experience for all students and provide particular support for disabled students. This guideline presents key issues related to the use of synchronous communication tools in a VLE, based on perspectives of disabled students and academic staff. Pedagogical, practical and strategic implications have been identified and set in context within discussion and action points to encourage extended reflection on individual, departmental and institutional practice.

Synchronous communication tools

Synchronous communication, sometimes referred to as “virtual chat”, is a form of communication closely resembling real-time conversation. Individuals log into a system (e.g. a VLE) and can communicate directly with anyone else logged into the same system at the same time. The synchronous communication area may include a series of tools, including a whiteboard space for annotations and a course map to be able to display documents or information held within the VLE. The tutor maintains control over the tools students have access to and can either converse with the whole group or respond to individual questions. Sessions can also be archived for the purposes of revision and reflection.

“Everyone in the group benefits as long as everyone contributes.”

ALERT Student

Recommendations

Pedagogical

- Provide access to a synchronous session as a follow up to a face-to-face session. This facilitates students in extending their knowledge and ideas beyond the classroom time and enables those who may be physically impaired to participate more easily.
- Set up synchronous discussion to facilitate group work as this can encourage group cohesion, especially for those students whose physical impairment may prevent them from attending face-to-face sessions.
- Plan sessions to achieve learning and teaching objectives.

Practical

- Schedule virtual office hour sessions, whereby you establish times when you will be available online to answer specific questions from students. This will encourage quieter and less confident students to ask questions.
- Provide archived access to all the synchronous sessions that have taken place for the students to use for revision purposes and reflection.
- Synchronous discussion is not the most useful tool for a student with a slow typing speed or who cannot communicate quickly. Therefore, an awareness is needed of these specific disabilities to be able to plan for an alternate method of communication.

Strategic

- Devise a structure for the commencement and duration of the synchronous sessions to ensure that students know when other students and the tutor will be present for discussion.
- Establish rules for communication including the expected roles of the tutor and students e.g. language used.

Pedagogical

Stimulation of discussion, innovation and spontaneity of ideas

The use of synchronous communication to support face-to-face sessions can be useful as it can extend interactions between tutor and student, and student and student, beyond classroom time. This enables students to debate and explore concepts and ideas to further their understanding. It is often the case that this medium is initially used for more informal exchanges among students. Therefore, if this is taken into consideration for example, by following the “socialization” stage of Salmon’s five stage model (Salmon 2000), this often leads to further prolific academic debate. This alternative mechanism for being able to interact with other students and the tutor may be of particular relevance to those students who may have a disability in which their writing speed impedes their learning. This may be the case for certain students with dyslexia or dyspraxia, where their typing speed is quicker than their writing speed; this type of learning environment enables them to contribute more equally.

“I’ve used it this year for the first time and it was actually really good for stimulating discussion in seminar groups outside the work, so that’s definitely something I think should be used more.”

ALERT Student

VLE recommendation: to enable students to become familiar and confident with using the technology, provide a space for socialisation prior to the academic discussion.

Student-centred interaction

Synchronous discussion can be a useful tool for encouraging a student-centred approach to learning. Students can use the forum to informally exchange ideas and opinions and ask questions of each other in a time and space convenient to them, encouraging students to take greater responsibility for their learning. For those students with a physical disability whose impairment may prevent them from attending face-to-face sessions, having the flexibility to learn at their convenience can be advantageous. Further to this, results of an annual survey of use of the University of Durham VLE found that 61% of students accessed the VLE out of term time from home (Newland et al, 2004). Therefore, with a high voluntary access rate from students in addition to face-to-face interactions, providing a means of communication and interaction online can further enhance the learning experience.

“It would be quite useful if you could just go on to the actual chat room... it doesn’t have to be a lecturer, it could be another class mate who’s actually found the answer, and even if they don’t tell you where it is they can at least guide you...”

ALERT Student

It should be noted however that synchronous communication might not always be appropriate, it can present problems for those students who cannot communicate quickly or those with a slower typing speed. For example, someone with a learning disability might take a longer time to compose their thoughts. Synchronous discussion is not very conducive to this type of learning as it is synonymous with the rapid delivery and execution of thoughts and ideas. Therefore, an awareness is needed of these specific disabilities to be able to plan for an alternate method of communication (e.g. email) when not all students in a group can fully participate using chat.

VLE recommendation: highlight the extensibility of the synchronous discussion tools and encourage students to use it as a communication medium. Suggest that for assignments a transcription may be kept in order to minimise note-taking.

Construction of ideas

The use of synchronous discussion can enhance the development of student's ideas as students are able to debate and bounce ideas off one another. Mason (1998) points out that "synchronous communications promote motivation and group cohesion, as well as providing good feedback, supporting consensus and decision making". In addition to this a study by Pavey and Garland found that different styles of learning experienced through online group work were useful to individual student's understanding of the work (Pavey and Garland, 2004). This is of particular importance to those students who are physically impaired who may not be able to attend all face-to-face sessions. Having access to such tools as synchronous discussion provides students with a forum to be able to build rapport and group cohesion with one another and can also overcome feelings of isolation.

"Simple things like that have been really useful if you need to get in contact and if you need to develop your ideas, so yes, it has influenced my learning."

ALERT Student

VLE recommendation: ensure that students are aware of when other students will be online in order for them to communicate. Schedule specific times or encourage students to schedule their own times.

Practical

Equality of contributions

For those students who may be quieter or lack confidence in face-to-face situations because of other more dominating individuals, the synchronous tool provides an equal environment in which they may feel more comfortable to contribute. A study by Suguri et al found that open and dynamic discussion took place among a mixture of students and students with disabilities, in particular deaf students, in an online synchronous setting (Suguri et al, 2002). However, face-to-face interactions with these same students showed them to be shy and un-communicative. This highlights the importance of anonymous dialogue and chat discussion for people with disabilities.

"Nobody could dominate the conversation physically because they weren't there."

ALERT Student

VLE recommendation: to encourage and give confidence to those students who might not normally contribute, allow anonymous postings.

Revision / reflection

In addition to using the synchronous medium for scheduled question and answer revision sessions, any session that has been recorded can be accessed in the archive for revision and reflection purposes. This is particularly useful for those students with disabilities such as dyslexia, dyspraxia or visual impairment or where writing is a particular issue. Having an archive of students' and tutors' contributions will provide access to a set of cohesive notes to support their learning.

"I think it would be really good thing to encourage... revision groups online."

ALERT Student

VLE recommendation: ensure all necessary software and plug-ins are installed prior to a virtual chat session. Check institutional technical support.

Strategic

Informal support

From a convenience point of view students value the notion of being able to access the synchronous tool for informal question and answer sessions. Again this is of particular use to those students with a physical impairment. It is also of benefit to tutors to prevent them from having to answer the same questions repeatedly. Tutors can post answers once during an open office hour session for all students to access. Also, encouraging students to run their own sessions and respond to each others questions will promote a more student-centred approach to learning.

"I think it would definitely be really good, because quite often people have got questions and if you can't find the answer in a resource, it would be quite useful if you could just go on to the actual chat room."

ALERT Student

VLE recommendation: notify students when you will be available online to answer questions or queries in 'virtual office hours'.

References

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Discussion / reflection points

Based on the issues considered, below are some discussion points to encourage reflection on existing practice and provision.

Pedagogical

- Why is the use of synchronous discussion useful for students with a physical disability?
- What are the benefits of synchronous discussion for revision purposes for students with disabilities?
- Are you actively using synchronous discussion to support your teaching? Or is it a tool that you will encourage your students to use and moderate themselves?

Practical

- What issues are related to the use of synchronous discussion with students with a slow typing speed?

Strategic

- Do you have information available to students about the structure and duration of synchronous sessions?
- Do you have departmental guidelines on usage e.g. language use, pedagogical aims?
- Do you have a departmental strategy as to use of the communication tools across various modules?

Action points

- Investigate the potential disparity of needs of your students to ensure you are utilising the correct tool. Ensure there is an alternative method of communication if this form of communication is not suited to all.
- Trial the software with colleagues before using it with students, to ensure that you are confident with using the various tools.
- Explore the other guidelines at the ALERT website – www.dur.ac.uk/alert