

Disabled students and holistic use of 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 use of 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.

A considered approach to VLE use

A VLE is an invaluable tool in learning and teaching and can provide a wealth of opportunities for access to a wide range of learning support materials and tools. Vital to the quality of the students learning experience, however, is the way in which staff utilize the environment. A considered approach to VLE use ensures provision for a greater diversity of students and appropriate implementation of learning resources can result in a repository of re-usable materials, discussion topics and quizzes, and more effective and evenly distributed staff time.

“You feel supported, and you feel like, if your notes aren't great, you can get better ones there, and for revision it's just gonna be so much easier. “

ALERT Student

Recommendations

Pedagogical

- Highlight to students how a VLE can complement face-to-face sessions. This can be achieved through the adoption of blended learning, where a combination of face-to-face and online learning is used.
- Encourage use by making tasks highly interactive and thus allowing students to assume independence and take a level of ownership of activities and learning support materials.

Practical

- Promote use of the VLE in face-to-face sessions, so students are aware of what materials are available and what is expected of them.
- Promote a consistent appearance and navigation structure. Make decisions about which tools and areas are appropriate and those which are not on the VLE interface. This will involve deciding which functions should be available to students, eg. make sure no empty folders or dead links appear.

Strategic

- Encourage use of the VLE by other academic and service departments, to foster a multifaceted support community online. Such a community may include disability support units, sports or recreational societies or careers services.
- Work collaboratively with colleagues to ensure a high level of consistency between modules. This will impact on students' expectations and be of help to students with poor organisational skills.
- Conduct an overview of departmental use, to promote consistency and staggered use of interactive tools so students experience and can contribute to a balanced programme.

Pedagogical

Support of face-to-face

Students believe that the use of a VLE as a repository for learning support materials or as an area in which to engage in interactive learning activities enhances the face-to-face learning experience (ALERT, 2004). Although it is clear that students do not feel that the VLE as a sole environment could replace contact with tutors, it is invaluable as a convenient, flexible and dependable resource for lecture support materials and interactive learning activities. This is particularly relevant to those students with a physical impairment who might be restricted in being able to engage in face-to-face interactions.

Laurillard states that VLEs can provide the "context of delivery" which enables students to achieve the maximum benefit from their study. This is vital as "the most stunning educational materials ever developed will fail to teach if the context of delivery fails" (Laurillard, 2002).

"...our tutor always tells us our work in the tutorial, but also sends it out again (via the VLE), you can always ask him questions, he gets straight back to you..."

ALERT Student

"...it's absolutely, fundamentally a supporting mechanism, and not one that necessarily drives the way in which I deliver my teaching."

ALERT Staff

VLE recommendation: integrate the use of the VLE within the curriculum by including references to its capabilities in face-to-face sessions.

Collaborative work, community and peer support

Encouraging students to work together fosters a sense of community and shared problem solving. Students can benefit from collaborative working in a number of ways and enable them to learn about VLE use through shared experience. This is particularly beneficial for those students who experience feelings of isolation because of their disability, the development of an online community offers them flexible access to peer support. Peer support groups, which either meet in person or online, can also help students to become familiar with the capabilities of the software. Such an approach illustrates Mason's Integrated Model of VLE use (Mason, 1998), in which student centred, collaborative learning is key.

"I think other students have been more of a help than the technical support or the lecturers as far as (troubleshooting using the VLE) goes."

ALERT Student

VLE recommendation: encourage students to work collaboratively by establishing online groups. Self-selection and assigning roles within these groups can be effective ways of encouraging students to participate.

Encouraging exploration

By making students aware in face-to-face sessions of what materials are available for their course through the VLE, they can be encouraged to interact with the environment and further their independent study. In giving students the confidence to use the VLE at a basic level, in communal or shared exercises, individual independent use can be promoted. VLE use can afford students greater control over their learning experiences (Eurelings et al, 1999), which is especially important for disabled students with a diversity of needs in terms of material delivery, format and timing.

“...if the benefits (of the VLE) are stressed enough, then I think it is down, eventually, to the individual to make the effort and to actually start searching ...”

ALERT Student

VLE recommendation: build students' confidence by demonstrating VLE tools in face-to-face sessions. This visualisation will give students an overview of potential uses.

Discipline specific appropriate use

The various tools within a VLE offer a high degree of customisation and the potential to deliver a course tailored to the needs of the discipline. For example, students enrolled on a Law course might benefit more from the use of discussion boards to moot topics whilst the use of multiple choice or short answer questions in a quiz may lend itself better to subjects in the scientific discipline, such as Chemistry. There may be problems in the reproduction of symbols of scientific notation, virtual whiteboard tools in synchronous discussion areas can be used for clarification.

“...an online quiz just isn't (useful) in Law. I suppose the physicists or mathematicians might find them useful. ”

ALERT Student

For more traditional subjects like Law, a VLE can ease the physical burden on those students with mobility problems by providing reading lists and digital documents in the place of heavy texts.

VLE recommendation: promote a more accessible learning experience by considered use of the VLE e.g. provide reading lists or announcements to assist students with mobility impairments or promote use of discussion boards for students who lack confidence in face-to-face sessions.

Practical

Simplicity of interface

Though the capabilities of the VLE are numerous, many of the features may not be appropriate. By turning off activity areas or unnecessary buttons, the interface is made clearer and the content more obvious to students. Unused areas and tools of the VLE can lead to frustration and demotivation of students. Where “shells” of courses are automatically created for each module in a VLE, but not actually used to store content, the potential exists for students to be enrolled in essentially empty content areas.

“...there may be tonnes of important stuff that I've missed because I've never had the time to go through every one of my courses clicking on buttons.”

ALERT Student

VLE recommendation: keep navigation obvious, intuitive and simple and ensure content is relevant.

Consistency

Keeping a uniform appearance to all modules will help students recognise, remember and plan their use of the VLE. Students with memory or concentration problems, slow reading speeds, dyslexia or dyspraxia benefit from having resources in a defined and constant space. This impacts on both navigation and appearance within the VLE. A consistent appearance and structure helps all students (Cann, 2004).

“...it's taken me a lot of time just to find my way round a given module. And there's a very poor consistency between modules...to the way it's laid out...”

ALERT Student

VLE recommendation: try to ensure that navigation, appearance and the organisation of information are similar across courses.

Awareness and training

A major consideration in extending use of a VLE is awareness of its capabilities and provision of training. Naturally these requirements will differ considerably for staff and students, but an ongoing and visible support service is vital in ensuring confidence in users. Whilst many students can see the potential applicability of a number of tools in the VLE, unless they have seen it in practice (where relevant), they may be unable to apply a valid learning scenario. For staff, it is vital to consider the flexibility that the VLE allows in designing courses within it, and to reflect this in the materials they produce (De Boer and Collis, 2005).

“...certainly refresher courses and introductory courses would have been more helpful. And also I think lecturers ...really stressing the need to get online and what is online and to use it as best we can...”

ALERT Student

VLE recommendation: establish inductions for staff and students, and regular sessions thereafter, through liaison with your IT department or technical support.

Strategic

Extended community

Most students have recreational, pastoral or academic related bodies of which they are members in addition to belonging to an academic department. By having a presence for these services or groups in the VLE, students can access a more extended variety of support information, announcements and communication facilities. This is of particular relevance to disabled students, who can keep informed of support activity of the disability support service in the same virtual location as their academic support material.

“I think the disability services should have one (a course area in the VLE) so notices could come on there rather than in your inbox... it would be a good way of incorporating that - keeping it all together.”

ALERT Student

VLE recommendation: provide an extended community for students through liaison with student support bodies such as disability support services, and also pastoral and recreational organisations. In so doing, much of their learning support and recreational material can be made available from one location.

Departmental /Institutional overview

Conducting a departmental or institutional overview can highlight trends in use of a VLE by academic staff and develop awareness as to the expectations and demands placed on students. Working strategically to conduct an audit of tools used and timescales adhered to will underscore who is using the VLE, in what way and with what objectives. Ascertaining when different discussion boards, for example, are run within a term can help in scheduling interactive exercises and consequently enable students to contribute equally to a number of tasks and experience a more balanced workload. Such an overview or audit may also be useful in establishing communities of practice and support networks in championing innovative and engaging use of the VLE, and promote increased use as a flexible learning of the VLE as an “universal utility” (DfES, 2005).

VLE recommendation: conduct a departmental overview of how the VLE is being used and what tools best support learning objectives. Not only will this enable peer staff to share practice, but also give an illustration of which different activities students are taking part in on a larger scale.

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

- Which aspects of the student experience do you think drive student expectations of how the VLE is used?
- In what ways would you use the VLE to extend learning activity in face-to-face sessions?
- What aspects of the nature of your academic discipline do you take into account in your use of the VLE?

Practical

- Are you more likely to turn off unnecessary features or leave all possible content areas available?

Strategic

- Do you have an agreed departmental / institutional strategy on what features of the VLE will be used?
- How are decisions about which VLE components are appropriate made?

Action points

- Consult your departmental and university policy on strategic use of a VLE.
- Make contact with your disabled students' support unit, and establish what VLE support is provided or may be necessary.
- Review the extent to which the VLE recommendations within these guidelines are already embedded within your own use of a VLE
- Explore the other guidelines at the ALERT website – www.dur.ac.uk/alert