Synchronous and asynchronous academic support for online students: a review of technological tools

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Diagram 1: Components of a learning design Oliver and Herrington (2001)


David R. Krathwohl A Revision of Bloom's Taxonomy: An Overview. THEORY INTO PRACTICE, Volume 41, Number
Send a link

• https://au.bbcollab.com/guest/a8d4725e15264cc0bf31ab053de99d2b
Research Objective

• The potential of an effective in-sourcing solution to a current institutional, and to some extent, nation-wide need to support online students.

• BC and AC for academic skills support and development to 1) embed discipline specific academic skills within online courses and 2) embed generic academic skills programs across online courses, or 3) as an online “Virtual Drop-In Centre”.
Dianati & Schubert (2017) Synchronous and asynchronous academic support for online students: a review of technological tools
Editing Vs Proofreading

What is the difference between editing and proofreading?

Select the correct answer:

Editing is on the paragraph level related to structure, flow and presentation while proofreading is related to sentence level grammar and syntax.

They are both the same

They both relate to checking grammatical mistakes
Literature review

• From the ‘fringes’ into a core part of the curriculum

• Transforms a deficit, remedial, and reactive service into a proactive, strength-based approach.

• learner-to-content, learner-to-learner, learner-to-instructor and learner-to-interface interaction

• Prior knowledge, cultural background, and academic support were not well-considered.
Literature review

• One key recommendation from the literature was the need to adapt content, communication style and method of interaction for online delivery.

• Barnhart and Stanfield (2011) advised on cutting content down compared to what they would normally deliver in a traditional lecture.

• Send email to connect students 2) don’t do too much 3) make them collaborative 4) get feedback and 5) be prepared.
Different Web Conferencing "Virtual Classroom" Software usage

- Blackboard Collaborate
- Adobe Connect
- Zoom

Universities in Australia
Recommendations

• 1) to schedule a practice run meeting for familiarity;
• 2) multiple channels to remind students of meeting date and time;
• 3) send meeting announcements and changes well ahead of time;
• 4) select the best layout for students depending on the number of students (i.e. class presentation vs small group discussion;
• 5) upload lecture material ahead of time to AC;
• 6) have a plan B if communication breaks down.
Ground rules were recommended to be adhered

1) mutual respect
2) everyone contributes
3) no criticism of speaker while speaking
4) communicate clearly
5) no interruptions
6) only one person speaking at a time (Armstrong and Thornton 2012)
Literature Review

• The benefit of BC over AC is that it provides a phone conferencing feature so if students experience internet issues, they can call the session phone number and enter a unique pin to still participate in class (Jones & Hansen 2014).

• Vu and Fadde (2013) who found that in AC, students were more likely, and preferred to chat more often, using the keyboard function, more so than video or audio discussion.

• Hudson, Knight, & Collins (2012, p. 37) “further studies are warranted to determine what features can enhance student participation, motivation, and achievement in real time, synchronous environments”.
Virtual Classrooms

• Collaborate
• AdobeConnect
• Zoom
• Skype
• WebEX
Research Methodology

Identify Problem

Interact with Subject

Monitoring & Compiling

Reflection and Solutions

Identify Research
Technology Acceptance Model
Adobe Connect
• While both BC and AC offer similar features (see Appendix B), BC is more predominantly used in a learning environment.

• BC has the benefit of developing reoccurring appointments, beneficial for institutions considering a ‘Virtual Drop-In Centre’

• Extremely beneficial, particularly when e-Learning sessions were scheduled before assignment due dates
Blackboard Collaborate
Breakout Rooms

• For ALL lecturers, ‘breakout rooms’ in AC and BC provide an avenue to foster greater peer-to-peer interaction. The purpose here is to decrease social isolation, which is often felt in online environments.
Recommendations

• 1) *Provide technical support.* It is helpful to have a technical person to sit in on the first session to support staff and students;

• 2) *Set protocols in the first session.* For example, if there is more than one participant, ask participants to mute their microphone when they are not talking to reduce background noise;

• 3) *Make the session interactive by using the various sharing functions.*

• and 4) *Remind students of the upcoming session* by sending the link to the prior to the session
• little attention has been paid to student training of web-conference virtual classroom software (Heiser, Stickler, & Furnborough, 2013).

• A multi-literacies approach that explicitly addresses digital literacies should be included to ensure that students can effectively use the program (Miller, 2015; Miller & Schulz, 2014; Roche, 2017).
Which one?

• A benefit of BC over AC is that participants can enable their own webcam and microphone, instead of relying on the host to enable the participant’s microphone or webcam first.

• Academic staff found that BC’s most useful function was the phone conferencing feature which provided students with the option to phone in and join the session if they were having trouble with their microphone, webcam or internet connection.

• Due to bandwidth saturation, both tools worked best when the number of webcams was limited to a maximum of five at a time.

• Another benefit of BC over AC is that students can use the subject ‘course room’ at any time to meet with other students or to test their equipment, without the need for the moderator or host to be present.
Recommendations

1) Provide technical support. It is helpful to have a technical person to sit in on the first session to support staff and students;

2) Set protocols in the first session. For example, if there is more than one participant, ask participants to mute their microphone when they are not talking to reduce background noise;

3) Make the session interactive by using the various sharing functions.

4) Remind students of the upcoming session. Post an announcement in the LMS or use an appointment-booking tool such as Moodle's Scheduler tool for students to book appointments for one-on-one academic support.
• The consensus of feedback received from academic staff, after receiving training in both BC and AC, was that BC was easier to use and more useful due to its simplicity of design.

• While there has been a rapid move to introduce commercial outsourcing services, two effective, no-cost, in-house asynchronous and synchronous solutions that involve minimal training have been offered in this paper as practical solutions to compliment the important work of ALL in academia.
Drawbacks

- Digital privacy
- Reliance
- Distraction
- Role of teacher

Benefits

- Engaging
- Interactive
- accessible
- Collaborative
Language Learning Activities
- e-scenarios, e-problems
- E-inquiry based, e-teams

Learning Learning Support
- Virtual Online, Support, instructions, subject guides, support services
- Monitoring, feedback

Online participation
- Simulations, worksheets
- Language Learning Resources, e-books, endnote, Padlet, Office Mix, Trello, Audio PDFs

Scaffold Strategies
- e-PASS teams
- Virtual Classrooms, Breakouts rooms

Barriers to online academic support

- Learners require the necessary technological skills and may lack access to technical information and support.
- Learners require access to the hardware, software and internet connectivity for online learning.
- Learners may lack the institutional, digital and academic literacies needed for online instruction.
- Learners may not be aware of online protocols or how to enter a virtual classroom.
- Learners may lack access to other support services such as careers, health and counselling services.
- Learners may lack, or may need to be made aware of their ethical, privacy, data and confidentiality rights online.
- Learners need to self assess whether they have the skills to be successful in their chosen program.
- Learners require access to individualized disability-specific support services or suitable assistive technology.
- Learners may require additional academic resources to assist in their academic writing skills.
- Learners may lack a peer support group online.

Suggestions to overcome barriers

- Provide learners with information on technical requirements and refer learners to the helpdesk for technical support.
- Get to know learners to determine what supports are most critical. Dedicate time aside to increase student comfortableness.
- Provide digital, academic and institutional literacies and resources via web-conferencing synchronous.
- Provide online administrative supports and services, a good practice guide that includes online pedagogical considerations.
- Provide 'Virtual Counsellor' or 'Virtual Advocacy' synchronous support inside Moodle Activity Resources.
- Provide learners with information on what is recorded, shared, stored and analysed in the Virtual Classroom.
- Provide learners with advice for making specific program and career related decisions.
- Provide learners with flexible, continuously available, easily accessible support services.
- Provide online resources in referencing, academic writing and other resources linked from Moodle course page.
- Provide opportunities for students to develop peer to peer relations through breakout rooms, or social spaces online.
Real-time collaborative streaming

- Padlet
- Wordcloud
- UQ wordstream
- LearnSpace TesTeach
- Sketchboard
- Tag Crowd
Asynchronous e-learning scenarios

- Office Mix
- i-Spring
- Adobe Presenter
- Adobe Captivate
Authoring & Editing Tools

- Office Mix
- i-Spring
- Camtasia
- Kaltura
- Echo360 Personal Capture
Figure 1. Different Web Conferencing "Virtual Classroom" Software usage by Australian Universities (Dianati & Schubert, 2017).
Development
<table>
<thead>
<tr>
<th>Category</th>
<th>Baseline</th>
<th>Effective</th>
<th>Exemplary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learner Support &amp; Resources</strong></td>
<td>A. Course contains limited information for online learner support and links to campus resources.</td>
<td>A. Course contains adequate information for online learner support and links to campus resources.</td>
<td>A. Course contains extensive information about being an online learner and links to campus resources.</td>
</tr>
<tr>
<td></td>
<td>B. Course provides limited course-specific resources, limited contact information for instructor, department, and/or program.</td>
<td>B. Course provides adequate course-specific resources, some contact information for instructor, department, and program.</td>
<td>B. Course provides a variety of course-specific resources, contact information for instructor, department, and program.</td>
</tr>
<tr>
<td></td>
<td>C. Course offers limited</td>
<td>C. Course offers access to</td>
<td>C. Course offers access to</td>
</tr>
<tr>
<td><strong>Online Organization &amp; Design</strong></td>
<td>A. Much of the course is under construction, with some key components identified such as the syllabus.</td>
<td>A. Course is organized and navigable. Students can understand the key components and structure of the course.</td>
<td>A. Course is well-organized and easy to navigate. Students can clearly understand all components and structure of the course.</td>
</tr>
<tr>
<td></td>
<td>B. Course syllabus is unclear about what is expected of students.</td>
<td>B. Course syllabus identifies and delineates the role the online environment will play in the course.</td>
<td>B. Course syllabus identifies and clearly delineates the role the online environment will play in the total course.</td>
</tr>
<tr>
<td></td>
<td>C. Aesthetic design does not present and communicate course information clearly.</td>
<td>C. Aesthetic design presents and communicates course information clearly.</td>
<td>C. Aesthetic design presents and communicates course information clearly throughout the course.</td>
</tr>
</tbody>
</table>
e-Portfolios

- Wix
- Bb Blog
- Mahara
- Google Keep
- PebblePad
Online interactive resources

- Quizlet Live
- Study-Blue
- Trello
- Google Keep
- NearPod
E-marking

- Turn it in Grade-Mark
- Blackboard Grade Centre
- Adobe/Microsoft Digital inking
- Grammarly/Grammark
- Semant
- Adobe PDF voice comments
Real-time interactive Polling

• Kahoot
• Quizziz
• Turning Point (Clickers)
• Socrative
• Quizlet
E-Digital Story Telling

• Piktochart
• Visme
• Canva
• Buncee
• Prezi
Interactive Language Learning

- Busuu
- Duolingo
- Memrise
- Babbel
- Alison
E-peer assessment

- Tunitin
- PeerMark
- Peerwise
- Peergrade
Social Media

- Twitter
- Fb Page
- Google + hangs
- Edmodo
- Pinterest
- Newsela
STUDENT SUPPORT

- Peer-mentoring support (PASS)
- Turn-it-in support
- Academic Writing Centre Support
- Health and Well Being Support
- International Student Support
- Disability Support
- Technology and ITS Support
- Library Support
Thank you


• Digital Media, Web 2.0 and More for Learning: IAP.


