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Technical Evaluation Report

16. Integrated Collaborative Tools

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Abstract

Previous reports in this series have featured examples of integrated products that combine into a single software package, techniques offered individually by other products. Increasing acceptance of online collaboration is generating interest in such tools on the part of product developers and users. The distance education (DE) market is now awash with integrated products involving methods ranging from the relatively standard text-based conferencing to synchronous and asynchronous audio and video conferencing techniques. Integrated products typically add a range of ancillary tools to these main features (e.g., whiteboards, polling methods, file sharing and email capability). When choosing an appropriate product for DE usage it is important to discern which of the multitude of features are essential in different situations. The current study examines five contrasting integrated products from the DE user's perspective.

Evaluation Criteria

Initially, the evaluation team attempted to identify a set of freeware conferencing methods that had not been evaluated in the series previously. However, integrated collaboration packages are typically targeted at the private sector, causing many manufacturers to place hefty price tags on them. So five no cost or low cost products/ services were examined in terms of their ease of access, intuitiveness, and functionality, and in relation to the evaluation criteria used in earlier reports in the series:

- *Common Technical Framework:* issues such as minimum system requirements, interoperability, scalability, and file sharing
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- *Clarity:* ease of presentation, noise, clutter, etc.
- *Control:* design of the Web-human interface and access to content
- *Complexity:* user processes such as registration, log in, and inter website navigation
- *Costs:* fixed and variable monetary and maintenance time costs

Each of these criteria contains sub-divisions that apply to one or more of the product's synchronous and asynchronous components.

As indicated in previous reports, manufacturers use the term integrated in a number of ways: course/ learning management systems; learning environments; total learning solutions, etc. There is little standardisation in the use of these terms, however, and the current study does not claim to represent any particular integrated product classification.

Trials of Integrated Products

1) ***CommunityZero*** is a set of three differently priced products (*Core, Advantage*, & *Server*), offering interactive tools for asynchronous discussion and content sharing within a single Web-based package. The evaluation team selected the least expensive option, *Core*, for review. *Core* contains a comprehensive set of asynchronous collaboration tools, including bulletin board, calendar and note board, file sharing via separate directories for text and graphic files, and a single-question polling feature. It lacks the useful instructional tools of synchronous audio and whiteboard, and the ability to sort text messages into threaded groups. In a typical DE course, the volume of folders and postings can become disorientating. Five levels of access are available (founder, administrator, moderator, member, and guest), and members may be granted individualized access. The membership sign up process is somewhat confusing, and new members must register with *CommunityZero* before using an invitation key to join a community. The *Core* capacity is five megabytes of file storage, unlimited text storage, and 10,000 page views (PV) per month. More file storage and PV are available at a price. *Core* seems to have a high degree of market stability, being part of an ongoing strategy to develop customised Web-hosting packages. The evaluation team encountered lengthy download times, probably due to intense traffic on the *CommunityZero* servers.

2) ***Delphi Forums*** is an integrated text-based package available both as freeware and in an enhanced fee-based version. The freeware includes private forums, chat, file transfer, and polling tools. When users log in, a list of the most recently viewed forums appears and users have the straightforward option of adding a forum to their "Favourites" file. *Delphi Forums* is appropriate for educational users, with no intrusive pop up advertising. There is no limit to the size of conference messages, though the lack of audio conferencing, whiteboard, and archiving facilities limits the product's utility in DE. A major advantage is the product's cross-platform inter-operability (PC, Macintosh, etc.).

3) ***WebClassroom's*** main interface is a synchronous whiteboard where users can add, view, and collaborate on text and image files, post Web links and conduct polls. The creation of optional headings and graphic boxes assists in the organisation of files on the whiteboard. The moderator has limited options for controlling users' access to the tools, giving them either no privileges or complete access. A Hand-Raising feature allows moderators to address questions and comments in sequence. The Image Whiteboard, but not the main whiteboard, can be archived for later use. The efficient group use of *WebClassroom* requires practice and the development of user protocols. Uploaded files can be jointly edited and saved to users' hard drives. To avoid confusion, it would be wise to restrict the participants who can post updated files. The whiteboard display can extend beyond the viewing window, with scrolling access to the whole display. This feature could lead users to overlook the files beyond the immediate display. *WebClassroom* does not have an asynchronous chat feature, though its Post-a-Note and Question & Answer features provide unthreaded, asynchronous messaging.

4) ***Wimba*** combines text-based conferencing with asynchronous audio features, including voice boards and streaming audio that can be added to websites, also email and language learning tools, all hosted on the vendor's servers. *Wimba* is straightforward to use and is a cross platform application (PC and Macintosh) that runs on both Netscape and Explorer browsers. The product does not have synchronous text or audio conferencing, whiteboard, or file sharing features. There is no apparent size limit to the audio files that can be used, and the evaluation team encountered no audio streaming problems. *Wimba* has particular potential in language education, although one of the team experienced difficulty in the attempt to access the product through her PC in Japan, using a non-English (Japanese) operating system. *Wimba* offers a time limited, cost free trial period with a limit of five simultaneous users to each message board. The product's license agreement requires the user to forfeit copyright to any material posted on the *Wimba* server,

which is a major concern for producers of educational materials and educators responsible for their students' rights of ownership over the messages they create in educational situations.

5) *Yahoo Groups* is an online service that can be used as a simple listserv, and for sending members postings by email without their need to access the website directly. It can also be used as an asynchronous platform on which users can post messages and files, access Web links, engage in synchronous text chat and polls, and study database files created by the moderator. Files can be posted directly on the website in the Files, Photos, and Database sections, though can be attached to specific postings by email only, rather than on the website itself. The administrator (owner) of the group can pre-approve postings, set the members' levels of access to different features, and grant administrative privileges to a moderator. *Yahoo Groups* features a searchable archive of messages, and the group calendar can be used to schedule meetings, post assignment deadlines, and send reminder notes to members by email. The service's pop up advertisements can be a nuisance in an educational situation. The chat client indicates it has a voice feature, although at the time of testing this feature did not work. [*Yahoo* Support indicated that this feature was not available.] If synchronous audio is necessary, *Yahoo Groups* could be used in conjunction with *Yahoo Messenger* (see earlier reports).

[**Note:** The audio section of the evaluation website accompanying these reviews refers to other integrated products, including *CentraNow*, *Conversa*, and *TeamSpace.*]

Conclusions

Current lack of clear standards for integrated collaborative products allows vendors to provide a wide range of tools, some useful in DE, other less so. *CommunityZero*, *Delphi Forums*, and *Yahoo Groups* all permit adequate text/ image based collaboration at no cost, although would be more useful for DE users if they also incorporated some audio features. *Wimba* provides asynchronous audio and Web development features with particular utility in language education, though at this stage lacks the synchronous tools that could complement this function. The most unusual of the five products is *WebClassroom*, which provides a range of tools in a whiteboard setting which is original but at times confusing. All five products are non–platform specific, and users can access the collaborative spaces from each of the major types of computers and browsers. They are also all Web hosted products, which remove the need to download and install extensive software. This may be regarded as an advantage for DE users, though the added proprietary requirements of *Wimba* reduce its applicability in educational contexts. Despite the fact that each product offers useful features, they also have distinct shortcomings for DE usage, and these should be carefully examined in the selection of products for specific educational purposes.

N.B. Owing to the speed with which Web addresses are changed, the online references cited in this report may be outdated. They can be checked at the Athabasca University software evaluation site: http://cde.athabascau.ca/softeval/. Italicised product names in this report are assumed to be registered trademarks.

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