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Technical Evaluation Report

14. Chat and Instant Messaging Systems (synchronous): Report 2/ 3

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Abstract

This study extends the earlier review of online chat systems ([Report 6](#)), by reviewing a further seven products that provide text-based instant messaging (IM). The functionality of these products in distance education contexts is stressed in relation to their comparative costs, complexity, control, clarity, technical framework, and other functional options.

Evaluation Criteria

Instant messaging (IM) is a method of synchronous communication that is rapidly developing from being a means of entertainment for computer users and romance seekers to a legitimate method of remote communication in business and distance education (DE). Because bandwidth and the costs of appropriate hardware for voice and video communication still represent barriers for many DE users, text messaging remains a useful method of computer based synchronous communication. As IM gains in popularity as a DE tool, it is important to establish evaluation criteria for the variety of available IM applications. The criteria applied in this study were divided into two groups:

1) Basic features useful in DE, including:

- Ease of installation and availability of product support
- Speed of download on a high speed connection
- Technical competence required to use the product
- Administrative options (e.g., ability to screen users and ignore unwanted invitations; create a private chat room; locate other users; archive instant messaging conversations)
- Status indicators regarding personal and other users' availability
- Overall chat window readability

2) Useful features not essential in DE, including:

- Participants' ability to update their personal profiles; accept chat from contacts not on a personal address list; send and receive files
- Support for webcam co-browsing, and online audio activities
- Availability of audio and other alerting signals
- Interoperability with other multiple IM services

Trials of Free Products

1) **AOL Messenger (AOL-IM)** is the latest version of this popular product, which provides a full set of IM features useful to the DE student and teacher. Its interface has a simple but professional look that provides a variety of personal customisation features such as audio and text alerts, virus checking on file transfer, privacy options, status indicator, mail notification, formatting and visual display options. Drawbacks are that the product is proprietary and lacks interoperability, thus preventing users from receiving messages from contacts who use other popular IM tools. This shortcoming obliges users to persuade their contacts to adopt the *AOL-IM* product also.

2) **Jabber** has a similar look and feel to *AOL-IM*. *Jabber* is available in a light Web-based version which does not require the program to be installed on users' computer; and offers a range of personal customisation features and interoperability with other IM applications including *MSN Messenger* and *ICQ*. *Jabber* lacks some of the formatting features provided by *AOL-IM* (e.g., emoticons, icon tools for links, images and email support).

3) **MSN Messenger** is an IM program that provides notification when contacts are online. In the latest version, messages can be sent and chat initiated with up to four contacts simultaneously. The product provides adequate text messaging and file-transfer options. It features large, easily recognised icons and menus that simplify tasks such as the addition of contacts to address lists. As with *AOL-IM*, buddies can be organised into groups, and moved or copied from one group to another by a simple drag-and-drop method. Because contact lists are stored on the *MSN* servers, they are accessible from any *Messenger*-equipped computer. Unfortunately, the full contact list is permanently displayed and this can be annoying if the list is lengthy. Users cannot make themselves invisible or limit file-transfer capabilities to specific contacts. However, they can block all contacts from seeing that they are online. They can also provide a list of others who have added them to their contact lists, and can require others to obtain permission before doing so. The product requires more memory than other products tested in this study, and lacks interoperability with other IM products.

4) **Odigo** includes basic chat and IM features without the simple look and feel ideal for DE users. Participants interact through a 3-D interface with features including personalised icons (avatars) representing simultaneous contacts. The application's useful features include message-filtering options aimed at locating chat partners with similar interests, and co-browsing (Web tours), which enable users to chat and browse on the Web without having to move between separate browser windows.

5) **Trillian** is a "one fits many" package that allows users to connect with a range of messaging clients, including *IRC*, *AIM*, *ICQ*, *MSN*, and *Yahoo*, through a single interface display. *Trillian* eliminates the need to run multiple IM clients in order to stay in touch with the users of different IM services. *Trillian* provides access to features available in those other services, and it reduces the amount of hard-disk space required to run multiple IM applications. Contact lists from the different services are dynamically updated. Set-up wizards guide the user through the creation of user names and passwords for the different services available. The look-and-feel of the *Trillian* interface can be customised by the use of downloadable formats (skins). The package permits multiple user profiles, so that users who share a single computer can each establish an individual IM account via the same client software. Multi-party chat is only available among *MSN Messenger* users, and there are no audio/ video enhancements or free chat-room features. *Trillian* runs satisfactorily over low bandwidth, and supports the Windows environment only. Frequent updates are required, though an auto-update feature eases the downloading and installation of the latest software patches.

Trials of Priced, Integrated Products

6) *Illuminate (vClass)*. Formerly called *TutorsEdge*, this is a well-integrated product providing synchronous text messaging, audio, polling, and whiteboard features via multi-point connections. *Illuminate (vClass)* is not cost free, though it is easy to install and use. Classroom meetings have to be organised in advance and passwords issued to participants for access. This makes *Illuminate (vClass)* better suited to instructor controlled presentations and discussions than to student initiated interactions. Instructors assign rights to the participants in each meeting, and can allow others to take over an instructor capacity once online. Slide presentations can be loaded for use in a session, and participants can be permitted to browse through the slides independently or at the instructor's pace. In one of our test sessions, involving six websites and over 20 participants, slides were delivered relatively quickly to users with low-bandwidth connections. *Illuminate (vClass)* permits public and private text messaging, but participants should note that users with chat room administrative privileges (e.g., the instructor) have access to both types of message. The product runs satisfactorily on slow dial-up connections using client processors with speeds from 250 MHz upwards. Download and installation of the large software file is time consuming, lasting approximately 20 minutes on a local area network (LAN) connection via a 56K router connection.

7) *PictureTalk* provides, at a financial cost, a Web-based technology for live, desktop screen casts across the Internet and corporate networks to an unlimited number of session participants. Synchronous text messaging is just one component of the package, which also includes synchronous text chatting, file and application sharing, audio, a whiteboard, live screen capture, transfer of desktop control, and the ability to conduct spontaneous meetings without an organiser (i.e., instructor). Participants can send text messages to the presenter and other participants, either privately or in the group at large. The complexity of *PictureTalk* is both an asset and a liability. It has a relatively steep learning curve, which is worth considering if application sharing between a number of participants is a priority. The product supports a seamless cross-platform environment (PC, Macintosh and Unix); and its services can be hosted externally or through licensed server software. A performance optimiser allows presenters to choose between display quality and speed, thereby allowing all participants to benefit regardless of their bandwidth or platform.

Conclusions

Of the seven products reviewed, the most unique features are provided by *Trillian*. This product provides efficient no frills, synchronous text messaging, as well as integration with other IM tools. *Trillian* is also available at no cost. Users can install *Trillian* more speedily than many of the other products compared in the current study. All of the products tested have advantages and disadvantages, and the prospective user should examine these before selecting a product for particular educational purposes. Most products use variations of the standard IM interface, and are intuitive and visually uncluttered. *Odigo*, on the other hand, places a greater emphasis on graphic appeal than on text messaging efficiency, and its relative visual clutter causes it to be less intuitive than the other products, and more appropriate for online gaming than for educational uses.

AOL-IM has a convenient chat screen, though *Jabber* has higher interoperability on different user platforms. As IM technologies mature, interoperability will prove essential to the emergence of common cross platform standards. If audio communication is required as well as text messaging, *MSN Messenger* offers efficient two-way voice conferencing via a simple interface. It also provides instant text messaging between up to four individuals, though requires all participants to use the *MSN* application. *PictureTalk* can be used with a greater number of participants at relatively low cost, with a wide range of features. *Illuminate* is easy to learn and requires lower bandwidth, though is relatively costly and designed for teacher controlled communication. These factors reduce its usefulness as a spontaneous, collaborative tool for student use. If the use of no

cost tools is a priority, a combination of *MSN Messenger* and *Trillian* is recommended, providing optimal functionality for DE students as well as teachers.

The [next report](#) in this series will examine a further set of synchronous chat and instant-messaging tools.

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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