**Report into the use of CHAT in education**

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**1 This report**

The report is the result of the **ESCALATE** funded project: **Training courses in the use of CHAT for higher/further education** (June 2003 - September 2004).

(CHAT is defined here as synchronous text-based communication between two or more participants.

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**2 Goals**

The project’s research into the use of CHAT for online learning aimed to provide initial answers to questions such as:

* To what extent do students, who have used CHAT as part of their online learning process, feel it is effective?
* Do students on online courses feel their participation would be enhanced by the use of live, inter-active learning amongst themselves, other students and the tutor?
* Do students at a traditional campus based university feel that CHAT can be used to provide them with meaningful support for their studies?
* How can CHAT be used in online courses to support teaching in relation to lectures, discussions, question and answer sessions or short individual exercises, enabling a tutor to monitor learning with immediate feedback?

The project report analyses the students’ responses to their online learning experiences. It also presents methodologies and technical information connected with the use of CHAT drawn from one of the proposers’ CHAT based courses  and other online CHAT sources.

**Specific aims were:**

1 to gather information on approaches currently taken on the use of CHAT  in online learning in higher education;

2 to promote the use of CHAT in teaching and learning carried out online;

3 to highlight examples of good practice in relation to the use of CHAT  to enable and support learning amongst online students;

4 to develop a short, online, CHAT based staff training course in the use of CHAT and to pilot and evaluate its use before wider dissemination to the academic community.

These aims have been achieved. As an outcome, this short research report on CHAT teaching and learning has been prepared. It is based on:

* views/ideas of student users/non users of CHAT on online courses run during the Institute of Education’s online training course: Online Education & Training, and others.
* the experience of one of  the proposers’ use of CHAT in the Birkbeck College Media  Studies online courses
* a brief consideration of some literature in the field.

**2.1 More detailed comments on individual goals**

In this section we provide more information about how we set about achieving aims 1-4 outlined in the previous section.

* to gather information on approaches currently taken on the use of CHAT  in online learning in higher education

This was done by gathering information from members of the further and higher education community.

* to promote the use of CHAT in teaching and learning carried out online.

We did this by asking Melanie Heard-White to run a CHAT option several times during the Institute of Education’s Online Education and Training Course. In distance mode this was taken by 15 students but 167 further students on the same course also had the opportunity to read the materials and messages associated with the option. It was later also taken by 7 students as an option on the blended delivery of the same training course, on which a further 42 students had access to the materials and messages relating to the option.

* to highlight examples of good practice in relation to the use of CHAT  to enable and support learning amongst online students.

This was done by Melanie Heard-White and Gunter Saunders administering questionnaires to academic staff and students relating to their experience of using CHAT.

* to develop a short, online, CHAT based staff training course in the use of CHAT and to pilot and evaluate its use before wider dissemination to the academic community.

This was done through the two courses in Online Education and Training referred to in C.2. The option was devised and run by Melanie Heard-White. Positive responses to the CHAT option were received from those who took them. They also responded to a specific questionnaire about the use of CHAT. Moreover, several students chose to write their coursework essays on the use of CHAT in education.See *Appendix .*

It is often felt that there are problems associated with “using CHAT tools with more than two people involved. Since communication is by text, you need to be a fairly proficient typist. Often, by the time you have finished carefully typing your contribution, the discussion may have moved on to something else. In other words, unless everyone is responsible and agrees to take turns, which can be difficult in practice, since, for example, each participant may have a different speed of connection to the Internet, contributions made on the same topic can become separated on the screen. As a consequence of such difficulties, CHAT is currently rarely used on campus. It tends to be exploited more to help students who are taking a distance course with no or few face-to-face options. Some VLEs now have quite sophisticated CHAT tools which include an interactive whiteboard and controls that the tutor can use to ensure more proficient turn-taking” (Saunders & Pincas 2003, p.84).

However, as we argue below, it is the management of online discussions – whether CHAT or asynchronous – that will to a large extent determine their success. “A comparison with any game makes it clear that the better the rules, and the more closely they are adhered to, the more smoothly the game can be played. So, if well-organised, on-line group activities can become a normal form of communication for all students and tutors more quickly than a totally free structure would allow” (Saunders & Pincas 2003, p.66).

**3 Experience of using CHAT for educational purposes**

CHAT is still very much in its infancy and it has been used mainly for social purposes by the young.

The key problems that people refer to relate to technology as such, especially the need for reliable technology.

Our questionnaires showed that 40% of lecturers taught between five to twenty students per group. Without knowing more about the context of the teaching, it is impossible to make pronouncements on group size. However, it is reasonable to assume that managing 20 people for a coherent discussion online will be as problematic as doing so in a normal seminar room, and possibly moreso. For project work in which students need to co-operate closely with each other, between four and six active group members may be as many as can reasonably work together. In a more general on-line collaboration, however, the number of participants can comfortably be larger, since they will not be dependent on each others’ contributions to complete a joint project; so there might be as many as 14 (Saunders & Pincas 2003, p.67-8).

In connection with the planning of CHAT seminars, a variety of approaches were revealed by the responses to our questionnaires:-

* + - CHAT as a forum for guest speakers
		- Giving students a topic and ‘turning them loose’
		- Releasing a discussion question on the morning of the CHAT session.
		- Holding impromptu sessions
		- Using CHAT as “office hours”, ie tutorial meetings
		- Planned lessons

Problems referred to in the responses indicated that people were concerned about several key issues:

* Because CHAT allows everyone to send a message at any time, coherence is often lost, and adjacency pairs are frequently separated by other messages. This also occurs, of course, in asynchronous online discussions. Both modes require firm management.
* Handling a class online without paralinguistic feedback could be unsettling.
* Messages tend to arrive, not only in sometimes chaotic order, but also in very quick succession.
* It would take time for participants to acclimatise to CHAT.
* Staff were anxious about the burden of frequent use of CHAT.

As already pointed out, the key to avoidance of these problems is sensible structuring of any CHAT session, with the use of a method of communication that avoids the “free-for-all” randomness that, to a large extent, give rise to the above problems.

**4 Recommendations for the use of CHAT**

Self-evidently, since CHAT has the features of synchronous conversation, it is possible to use it for the very same things that oral interaction with students could be used for, e.g.

* Answering questions
* Individual tutorials
* Teaching with questions allowed
* Students working independently, either in pairs, or groups

Melanie Heard White’s solution to some of the CHAT management problems – as evidenced in the sessions she ran within the Online Education & Training course - was to use the visual representation of a virtual seating plan, in which students could imagine themselves seated in a circle and taking turns around that circle. In practice, of course, they did attempt to respond to each other’s messages as in natural conversation, i.e. without respecting the circle. However, for their major contributions to the seminar, e.g. when reporting on work done in preparation, or when asked by the tutor to respond, the did acknowledge the pre-set turn-taking.

Another of Melanie Heard White’s techniques of assisting the messaging process was to try to overcome the users’ difficulty in knowing when to type/send their response to a message that was flowing onto their screen. She asked them always to limit their contributions to an agreed length [in her case three sentences] and also to signal when their message was complete [in her case placing the hash sign [#] at the end. As can be imagined, these methods always take some time to become automatic.

As far as the tutor’s management and control of the synchronous communication process is concerned, Melanie Heard White suggested various practical measures, such as preparing typed comments to students in advance, e.g. praise, acknowledgement, request for a contribution, etc., so that these could be quickly copy/pasted into the CHAT without the need for laborious typing. She also recommended that tutors should respond to each student’s contribution, even if only with a one-word acknowledgement, in order to maintain presence and control.

Anita Pincas’ own experience as a respondent to AOL CHAT sessions for parents requesting advice about education is also of interest. In the AOL system, a producer intercepted all incoming CHAT questions, and “fed” them into the CHAT at appropriate moments. This is probably too cumbersome for most educational uses, but it could be of value for a CHAT associated with an online conference, or open CHAT discussion following an internet lecture broadcast [always depending on the CHAT software selected – see below].

It goes without saying that a CHAT seminar should be organised with the same careful preparation as a traditional, face to face, seminar, ie students need to be told what they need to do in advance, what will be expected of them during the seminar, whether they are being assessed or not, and so forth. In addition, for CHAT, technical issues need to be explained as clearly as possible, and wherever feasible, students should be given ample opportunity to practise new technology in advance.

**5 Recommendations to the HE teaching community re use of CHAT**

**5.1. Questionnaire results.**

A questionnaire designed for lecturers by Melanie Heard-White, Anita Pincas and Gunter Saunders, was made available on the WWW and publicised via JISC mailing lists. Eighty-seven academic staff completed the questionnaire.

The majority of respondents (77%) had used CHAT before. The most common use for CHAT was for teaching and learning (54% of those who had used CHAT) with the next most common usage being personal (26%) followed by research and business (10%). Only twelve per cent of those who had used CHAT thought that it was of little or no value to them with the remaining 88% stating that they found it either very useful (40%), useful (27%) or satisfactory (21%).

Over half of the respondents (58%) who had used CHAT had experienced technology problems. The most commonly encountered issue was the loss of Internet connection during a live CHAT or set up difficulties. With respect to the latter PCs would often not have the required plug-ins (e.g. Java runtime environment) to enable the CHAT software to work. 71% of those who had experienced technology problems indicated that these were easily resolved.

61% of respondents thought it would be useful to communicate with students on a regular basis using CHAT, with tutorials and revision sessions being the most common use. Respondents who did not think it would be useful gave a range of reasons which included:

* The fact that dialogue is much quicker by telephone
* No substitute for face-to-face
* No really satisfactory interface
* Asynchronous discussion boards are more useful
* Scheduling the time
* Useful only for the resolution of simple problems
* Too unstructured
* Poor participation due to time constraints
* Time zone differences
* Too many students

Respondents were also asked what did or would deter them from using CHAT. The most common reasons cited were a lack of information how to manage the use of CHAT and the unreliability of the technology.

Most respondents rated other communication media such as the telephone, email and asynchronous discussion boards as better than CHAT. The most popular means of communicating with students was face-to-face, followed by the telephone, discussion boards and then email.

Respondents were asked why they thought people used CHAT at all. A range of reasons were given and the most common were:

* To provide additional support for students
* It is part of the toolbox for teaching
* Convenient where no alternative (e.g. conference telephone calls) exists
* Cheap way to conduct real time communication
* A way for student on distance course to stay in contact

A number of respondents highlighted the speed with which participants in a CHAT session could actually contribute given that in most current circumstances a text based interface would be the norm. However it was pointed out by some that more sophisticated systems that included voice opportunities could reduce this problem. There were clear indications from those with experience of using CHAT that it was something that students seemed to want and could find useful. However, rather curiously, student attendance at scheduled sessions was poor and more often than not students sought merely to have access to the CHAT archive.

The problem of scheduling CHAT sessions was raised repeatedly. Time zone differences were one issue but the point was also made that distance students could be studying in that mode precisely because they would find it difficult to often be in a prescribed ‘place’ at a fixed time. It was also felt that more mature students would find it difficult to engage in a CHAT session and might therefore be disadvantaged by courses which used it intensively.

The problem of structuring CHAT sessions also came through frequently, with the main issue being one of disjointedness between contributions.

There seems to be a desire on the part of staff to exploit CHAT in certain circumstances, for example where there is no ready alternative or for distance courses. However there is a clear perception that technical difficulties and problems associated with managing a CHAT session limit its usefulness. There were indications that more staff would make use of CHAT in circumstances where the technology was more reliable and they were provided with effective approaches to organising and managing sessions. Those who had experience of using CHAT on courses tended to suggest that although students were keen to see it used, in reality attendance at sessions was poor.

**5.2 Student feedback**

A feedback questionnaire was also distributed to students who had experienced the planned use of CHAT sessions as an integral part of an online course.

The students were mainly individuals who described the use of CHAT as an alternative to face to face as ‘suiting their needs’, although over 50% indicated that they could have attended campus based seminars if required to do so. The students did experience precisely the technology problems highlighted by the respondents to the staff questionnaire (see above). However the majority of student respondents indicated that these problems were normally quite easily overcome. The structure of a CHAT session was very important to this group of students with very clear support for a ‘seating plan’ approach where each took their turn.

The students saw the use of CHAT as a means of interacting with the tutor and with fellow students. There was overwhelming agreement that the use of CHAT prevented any sense of isolation occurring during the course. They valued the use of CHAT session to receive and discuss feedback on coursework. Almost all students stated that they learned most effectively by seeing and doing and gave strong indications that CHAT session enabled them to learn in this way.

The students were asked about their view of the time delays which occurred due to connection speed. A majority did not believe that this in anyway affected their learning citing the ‘accidental’ provision of thinking time as useful.

In conclusion this group of students, whilst seeing the drawbacks of CHAT as compared to face to face, saw considerable advantage in its use given their circumstances.

A smaller number of students on campus based courses responded to a questionnaire about the use of CHAT. Most of the 24 respondents stated that they used CHAT for personal communication with others with only 3 indicating that they used it to directly support their learning. All of the respondents indicated that they would consider using CHAT for teaching, learning and research if encouraged to do so. They saw the main uses for CHAT as being:

* Provision of feedback on coursework
* Revision sessions prior to assessment.

Finally, the *Appendix* shows the many varied, but chiefly positive, comments from students in Melanie Heard-White’s CHAT course as delivered within this project.

To sum up, these surveys indicate that the use of CHAT is its infancy in the academic context. Some members of staff and some students are aware of its educational potential but it does require certain skills and techniques for it to be used effectively for academic rather than purely social purposes.

**6 Software**

In this section we provide some basic information about software. However, we would emphasise that software is constantly being developed and we would recommend that anyone considering using CHAT should do a web search to see what is currently available.

**6.1 Free**

It is not necessary to use expensive software. Most of the following list and comments are from

<http://www.freebielist.com/chat.htm>

and most of them have free trial opportunities.

**‘ParaChat** – is a"free" package providing a feature-rich, remotely hosted Java chat room, allowing for real-time interaction. As a Webmaster, you can cutomise the colour and language of the chat room, and also integrate it seamlessly into your site's page. For creating user appeal and repeat visits, ParaChat is an excellent tool.

**Chatzy** - is a new free and simple chat service with no installation procedure. Using this service, you can create your own chat room and invite people to join you instantly by e-mail. On most chat sites, you can only enter public chat rooms, or you need to use ports not available from behind a firewall. Chatzy is different and possibly the simplest chat site available on the Internet.

**ChatAge.com** - Provides free online chat rooms for teens and adults alike. ChatAge.com features three room categories: general (for all ages), teens and adults (for 18 years and over). The chat rooms here are moderated to ensure safety for younger chatters, although we advise caution in any Internet chat room.

**MSN Messenger** – is the freeware messenger program from Microsoft Network and has many functions in a small application. You can voice chat to anyone in the world (provided they have a copy of the program), share files, send pictures and have a text chats. If you use emoticons, MSN Messenger will automatically insert pictures to represent these. Note: includes a free USA dialing service.

**GCN** - houses an unusual free chat program that includes free video conferencing, has voice chat modes and is compatible with AIM, MSN, Yahoo! and also ICQ. Unlike other similar programs on the Internet, this one doesn't throw up any irritating pop-up adverts. After registering, you can also use 30MB of Web space and set up a Web e-mail account.

**ICQ** - "I Seek You", is a popular and legendary 4MB application that allows you to chat in real-time with other ICQ users and post instant text messages to them. Once registered, you'll receive a personal ID number that you can give to your friends, family and other ICQ buddies. Users can also send and receive files, play games and use the ICQ network to find relatives and friends.

**mIRC** – is a popular client that utilises IRC (Internet Relay Chat) and allows users to communicate in real-time with people from all over the globe. There are hundreds of useful features, more of which are explained in great detail at the official mIRC Web site.

**MyJabber** - is lightweight, configurable and very user friendly and allows you to interact with users of AIM, Yahoo!, MSN, plus has the ability to chat in Jabber chat rooms. It's also fully customisable with sounds, etc.

**Chat-Forum.com** - offers free Java-based chat rooms for use on your Web site. All are very easy to set up and add extra interactivity, possibly growing your site into an online community. They also offer various upgrades to existing chat rooms that are not offered in the freebie rooms. Technical support via email is excellent and has a very responsive reply time.

**Quick Chat** - Using their advanced code generator it is easy to add a java chat applet to your page with Quick Chat's services. Just copy and paste some HTML code into your Web site and the chat room will be set up. They also allow you to ban users who continually misuse the chat room and have a handy help/support page, where things such as frequently asked questions are covered.

**Chatway** – is a massive community Web site that focuses on chat for teens, adults, Internet newbies and romance. Apart from providing some of the best free chat rooms on the Web, Chatway has a message board where you can post, chat and reply to topics at your convenience. Games, a free email account and Net-ID's make this one of the most interesting Web sites to visit.

Note: this site is offline at the time of writing.

**AOL Instant Messenger** - was the Internet's first major instant messaging service. Now everyone online can access it, not just AOL subscribers. Using it, you can send and receive files, messages and even chat in real time. Features in the current version include the ability to play games online, receive text messages, share photos and host live conversations via voice chat.

**TaoChat** – is a voice-enabled chat and messaging service with a wide range of features. It is a small program and downloads within minutes. Although the application has many uses, one of the best has been the ability to set up private "conferences" and talk in complete privacy.

**ChattersOnline.com** - creates free chat rooms for your Web site and allows visitors to chat with their friends or family in real-time. No special expertise is needed to get started, using simple, step-by-step instructions. It also has a homepage, with news, message forums and various other Internet downloads.

**Odigo** - loads up dynamic buddy lists from ICQ, MSN, Yahoo! and AIM, then allows you to communicate with users of each program. It Odigo is reliable, with a wide range of features: voice chat, multi user conferencing, message archives, offline modes, content channels, people finder directory and popular pages.

**Yahoo! Messenger** - Yahoo!'s instant messaging application is one of the most widely used programs of its type and allows you to chat in real-time with users of the same program. Functions here include the ability to see when your "buddies" are online, send and receive files from other users, host private or public "conferences", voice chat, change font properties and much more.

**On Chat** - On Chat is a graphical chat community. Like traditional chat, you meet people and make friends. Join a discussion or create your own. Graphical chat adds a new dimension to traditional chat in that the experience is much more visual.  Chat rooms are pictures, not text.  A small graphic, called an avatar, represents each user in the room.

**Talk City** – helps to form truly global communities around businesses, ideas, interests, brands, and hobbies, offering a large selection of chat rooms from general chat to music and entertainment.

**Chatter Box** - Webmasters can link to a shared java applet and add Chatter Box's chat rooms to their page. This allows visitors to communicate with others on another Web site via their rooms. They also offer an online HTML editor and a message board where some basic technical support is often given by members & moderators.

**Lycos Chat** - is a very popular free chat provider and allows visitors to choose between either HTML, Java or Java Light scripting when viewing the rooms. All the rooms are free and allow for font modifications and emoticons.

**Excite Online Chat** - has voice chat, as an alternative to traditional text based chat. Another excellent feature is their "graphic chat" rooms.  Here, you pick a character and use them to represent yourself. Upon registering, you will have greater access to all of Excite's services

**Trillan** - provides an integrated program that can communicate directly with AIM, Yahoo! Messenger, MSN, ICQ and IRC. The latest version has many features, which can be seen at the developer's site.

**Jabber Instant Messenger** - allows you to communicate with MSN, Yahoo! and ICQ users at the same time, and even add them to your buddy/friends lists. The program is extremely easy to use and resembles a cross-breed of similar messaging applications. Includes sound effects, file transfer, text formatting, offline mode etc.

**Moove** – offers a 3D house-environment, offering graphical images of people mimicking what you say in the text. For example, if you specify to shake hands with your chat buddy, the virtual character will do the same on the screen. Note: this may require fast connections.

**Yahoo! Chat** - Yahoo! Chat is an entire community of people who share common interests and hobbies. There are thousands of rooms and there is also Voice Chat.

**PalTalk** - is a voice/text chat program that lets you call anyone in the world with excellent sound quality. You define a personal list of online connections and it will even tell you which of your friends are online at any given time (similar to ICQ and other Messenger services). PalTalk also allows users to talk using a sound card and microphone just as if they were on the telephone.

**Online Call** – can be used to communicate via the Internet and talk to friends and family. It works in a similar way to many instant messaging programs and notifies you when a "buddy" comes online. You can then select one of the many options (video conferencing, voice email, private text chat, group/conference chat and start to talk in what appears real-time.’

**GoToMeeting,** whichuses CHAT, claims to be the simplest and most cost-effective online meeting product on the market today. <https://www.gotomeeting.com/>

**6.2 For purchase**

An example of software that can be purchased can be seen at <http://www.multicity.com/servlet/WebsiteServePage/webmasters/chat/index>

where it is possible to have a demo of the features offered by the software.

Software that translates from one language to another is said to be available through:

<http://www.babelchat.com/>

The demonstration, however, did not work for our researcher, whose experience of instant translation packages in general is not high.

Ogata et al. (2001) report on some interesting and very specific software used successfully in CHAT between Chinese learners of Japanese and Japanese native speakers, which allowed them easily to investigate meaning differences between *kanji* in Chinese and Japanese. It would seem likely that other sophisticated technologies will develop to help specific needs in CHAT-based activities. However, as has been stated before, technical problems may be more likely to occur with increased sophistication and, especially when students are operating at a distance using a range of computer systems, the most prudent approach may be to keep the software as simple and straightforward as possible.

**6.3 Chatrooms**

An example for language teachers and learners can be found at:

<http://www.1-language.com/chat/>

**6.4 Muds and Moos**

We have not dealt with these long established, but now less often used methods of synchronous text communciation. However, a web search on either term will reveal a wealth of references.

**References**

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**under *Resources*.**

User’s comments on CHAT. See Appendix