**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), that was also further funded internally by the Institute of Education, University of London.

(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 review of 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 on the WWW and in professional journals. We focused particularly on aspects of the topic relating to the aims of the project outlined in section A. Our findings from this survey of the literature are discussed in section D below.

* 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 both through the literature review and by Melanie Heard-White and Gunter Saunders administering questionnaires to academic staff and students relating to their experience of using CHAT. The results of this survey are provided in Section E below.

* 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, and proved to be a particularly popular and successful one that has considerably helped to inform this report.

Very favourable and 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 further below.**

**3 Literature review**

This is presented according to the following themes which emerge quite strongly from the readings:

* Scepticism about the medium
* Experience of using CHAT for educational purposes
* Problems in using CHAT
* Recommendations re using CHAT
* Ways of using CHAT

**3.1 Scepticism about the medium**

In the literature there is a certain amount of healthy scepticism about the use of CHAT for educational purposes. Many people’s initial experience of CHAT resembles that which is parodied regularly in the Guardian’s Chatroom column, of which an abbreviated example is provided below [the full version is at: http://www.kniff.de/cgi-bin/cgiproxy/nph-proxy.cgi/010110A/http/www.guardian.co.uk/g2/story/0,3604,1247584,00.html]

**‘Chatroom of the week**

Welcome to the NewsRoom at permachat.co.uk, the UK's premier online current affairs forum!

**Tim Dowling**

**Guardian Unlimited Friday June 25, 2004**

>connecting to server ...

Current Host: Chris2

Current Topic: With an eye toward the next general election, both Tony Blair and Michael Howard are promising to improve the health service, but their proposals for reform differ in many respects. Whose plan will deliver a better NHS? What do you think?

Host\_Chris2: but aren't the Tories also promising more choice?

jenni@boughtledger: rooney is the new beckham IMHO

Pashmina: u need new glasses IMHO

capitalistpiglet: yes! A choice between public and private!

LadeezMan has entered the NewsRoom

nameless: IF IT SHRINKS WAITING LISTS ITS WORTH IT

LadeezMan: head

Bronco: hi ladeezman were u bin

LadeezMan: hurts

capitalistpiglet: waiting lists HAVE shrunk

Pashmina: u drink 2 much last nite then

…….

Host\_Chris2: this isn't quite what I meant

Bronco: my legs itch for no reason

jenni@boughtledger: I've got a lazy eye

…….

>connection to server has been terminated...’

This parody, with its incoherence, its abbreviated use of language, its tendency to stray quickly from the point, is something that rings true for many people. However, it is argued in, for example, Burnett et al (2003) that some of the specific features of this kind of CHAT ‘may encourage certain kinds of learning’. The features of CHAT that Burnett et al claim may have an educational potential are:

* the playful potential of the medium
* the reduction of all participants to an on-screen print persona
* the potential for several threads to develop allowing participants to discuss simultaneously topics at a variety of levels
* the need for brevity

We would, however, comment that these points, which are certainly characteristic of CHAT also occur in asynchronous CMC, as recognised by Schwier and Balbar (2002) who nevertheless point out that CHAT provides a sense of ‘urgency and immediacy’ that is particularly energising and is powerful in its ability to encourage the development of relationships and a sense of community.

In comparison with traditional computer communication, it is the immediacy of CHAT that would seem to be its characteristic feature. The advantages it brings are:

* Social – students feel a powerful connection with their fellows even though they may be operating in quite different time zones and contexts
* Practical – it is possible to sort out small problems and misunderstandings much more quickly than can be done in asynchronous computer-mediated communication.

**3.2 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. However, there is a slowly growing literature reporting on teachers’ experiences with CHAT for educational purposes and this section reports on some of these. Inevitably the teachers’ experience is linked to very specific contexts, though this provides insights that may be generalised for other disciplines.

Language teaching is an area where there has already been considerable interest in CHAT. Mark Freiermuth (2002) found it (perhaps surprisingly) useful in his work with students of English as a foreign language. Although he set up his lessons in a way that might seem rather artificial – students in a normal classroom ‘talking’ to each other through the medium of CHAT - he found that it had the following advantages:

* + the teacher can monitor all the groups in a way that is not possible when students are discussing normally in small groups;
	+ the teacher can monitor and guide when appropriate in a relatively inconspicuous way;
	+ as a can be kept of all the conversations it is easy for the teacher to do follow-up work focusing on the language that was produced by the students;
	+ it is easier for all students to contribute to the conversation as they can go back over other’s contributions if they do not understand them on first reading;
	+ the ability to see the conversation helps to keep students engaged, focused and contributing;

Freiermuth (2002) also found problems, the main ones being either technical or students’ lack of computing skills. His conclusions, however, are firmly positive: ‘Should this method of instruction replace spoken collaborative activities in the classroom? Of course not. However, Internet chat does provide language teachers with creative opportunities for promoting collaborative learning tasks and environments.’ (Freiermuth 2002: 40)

Similar positive conclusions for language learning were reached by Kitade (2000) and by Felix (2002). Felix provides a very effective discussion of the uses of the web in language teaching, including the potential of CHAT, and concludes:

‘Online learning is here to stay and … we should embrace the technology for what it can be – a tool which, in the hands of creative educational designers, dedicated online moderators and enthusiastic students, has the potential to enhance our learning experience beyond and in addition to the expectations of even the best classroom environment.’ (Felix: 2002: 12)

Hudson and Bruckman (2002) provide some interesting data for French language teaching. They illustrate how the medium allows teachers to take a much less dominant role in discussions, suggesting that student inhibitions are lowered by the fact that the discussions are not face-to-face. As such they conclude that ‘these conversational environments have strong potential to positively influence foreign language learning’. (Hudson and Bruckman 2002: 131).

Whether the focus of the CHAT session is on language learning or some other educational topic, experience reported in the literature suggests that CHAT has a useful role to play in teaching and learning. It is another tool for the teacher and, although it requires special skills for its management, it has considerable potential for learning purposes.

**3.3 Problems in using CHAT**

The key problems referred to time and again in the literature relate to technology as such, especially the need for reliable technology. A CHAT session will easily be spoiled if the software does not work or if any of the participant has connectivity problems. This can discourage participants from further experiments. However, growing familiarity with the medium outside the classroom is making this kind of problem less likely.

Some people also have problems with the abbreviated, highly colloquial kind of language used in CHAT sessions but this is not a universal concern. As a language teacher Freiermuth expressed concern about the quality of students’ language and warns teachers to try to curb excessive use of abbreviations. (Freiermuth 2002:40)

Freirmuth’s concerns about the abbreviated features of language used in CHAT sessions are not shared by Merchant (2001). He argues quite convincingly that new and fast forms of written communication are being developed and that those who are comfortable with using these forms will be at an advantage. He writes: ‘Derrida, in his deconstruciton of Plato’s Phaedrus, uncovers a telling ambiguity in the myth of Thamus and Theuth, arguing that Plato sees the invention of writing, like the discovery of a new drug, as both ‘poison’ and ‘medicine’. If we extend the analogy to the new forms of communication … we might ask whether these new electronic forms are really dangerously addictive and corrupting, or whether they are innovations which open new vistas of possibility.’ (Merchant 2000: 305)

Whether the linguistic characteristics of CHAT are regarded as problematic or not, there are some features of the medium that may pose problems for the teacher. These are summed up in an article by Cathy Burnett (2003). They are:

* contributions are likely to be very short, often just two or three lines, which can lead to a superficiality and lack of cohesion;
* the lack of paralinguistic clues which can make it easy to misunderstand someone’s tone or intention (this can also occur of course in asynchronous communication but is perhaps less of an issue in that contributors have more time to think about their message and how others may interpret it);
* the fact that several participants can be composing and posting at the same time can lead to a multi-stranded conversation with a lack of focus and quick ‘topic decay’;

All of these problems can be overcome, but they certainly need to be kept in mind when planning CHAT tasks or organising educational CHAT sessions.

As Melanie Heard-White points out, for CHAT the basic skill of typing is essential, and one is led to wonder whether lack of typing skills is a reason for the under-use of CHAT in education. Interestingly, the somewhat surprising result from the four questionnaires administered during this project was that the very students who had previously participated in CHAT lessons were the least able to touch type (48%). The majority of lecturers [61%], traditional campus students [57%] and online students [56%] claim to have the skill. It is thus clear from this small survey that lack of typing skills may not be an issue.

Our questionnaires also found that the number of students taught via a CHAT virtual classroom has often been perceived as a problem area in terms of budget implications and classroom management. Teaching between five to twenty students, at any one time in a CHAT virtual classroom was the most popular number ed, i.e. 40% of lecturers indicated they taught this number of students at any one time.

In connection with the planning of CHAT seminars, a variety of approaches were revealed:-

* + - Five lecturers planned lessons in advance
		- Seven lecturers held both planned and impromptu sessions
		- One lecturer held impromptu sessions
		- Two lecturers held “office hours” tutorial type sessions
		- One lecturer used CHAT as a forum for guest speakers
		- One lecturer gave students a topic and ‘turned them loose’
		- One lecturer released a discussion question on the morning of the CHAT session.

The main problems associated with using the CHAT service as the focal element in learning delivery (in addition to the technology problems outlined below) include:-

* The threaded nature of CHAT sessions made responses sometimes difficult to match to the original question
* Classroom management
* Problems with those who are not used to CHAT culture
* The speed of sending and receiving messages
* Staff could be overwhelmed with additional engagement with students if CHAT proved too popular.

It would seem then that learning delivery via CHAT is under-used in higher education and one of the main reasons for this was found to be difficulties associated with teaching and management strategies. Feenberg (1989) refers to the difficulty of replicating face-to-face teaching and management strategies. Some of these difficulties reinforce the problems outlined above and are articulated as:-

* Lack of visual cues
* The tedious nature of reading scrolls of computer text
* The threaded nature of classroom discussions
* The time taken to send/receive messages
* Lack of opening and closing conversation cues.

Problems associated with lack of phatic signs and the threaded nature of classroom discussions have been further highlighted by Herring and Nix (1997) in their study of a social CHAT channel on the Internet. In this study it was revealed that nearly half (47%) of all turns were “off-topic” in relation to the turn which they followed. Indeed Herring (1999) found that violations of sequential coherence are the rule rather than the exception in computer mediated communication (CMC) more generally. Indeed, Paolillo (1997) reports a case on an India IRC channel of a response separated from its initiation by 50 messages.

As will be seen below, 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**

A CHAT session is very different from either a face-to-face teaching situation or an asynchronous computer-mediated approach. Some preparation is therefore clearly required if the session is to be successful.

A number of studies in the literature focus either directly or in passing on the importance of appropriate task design. Munzer (2003) describes the use of CHAT in the context of a large software company. CHAT was used as part of the training process in using the operating system, Linux. The experience in this company was not felt to be satisfactory and this was attributed to an inadequate instructional design. Tasks must be used which are appropriate both to the content being taught and the specific learning context.

Linder and Rochon (2003) also emphasise this point in their discussion of a case study in Business English training. They conclude by saying: ‘Of particular importance in the system of interrelated design factors are the needs of the target group. These may only be addressed by the other elements if the design process begins with the assessment and description of the target group’s learning and technical skills or experience relevant for co-operative learning… We further suggest ‘check points’ throughout the process of developing the episode in order to ensure that the target group can realistically be expected to cope with the proposed tasks, materials, instructions, and tools, and whether they can successfully perform the proposed activities with or without a preceding technical or learning skills training. The specifications of such training should then develop alongside, and form an integral part of, the instructional design process.’ (Linder and Rochon 2003: 88)

A number of studies in the literature point to the way in which CHAT can be used as part of a set of methods for exploiting the potential of computers in education. They advocate its use to supplement email or bulletin board discussion groups, for example. In this way the attractive immediacy of CHAT can be exploited together with the flexibility that asynchronous communication allows. Carr-Chelman et al. (2000), for example, discuss how different methods can be combined to allow students working at a distance to collaborate on instructional design projects.

The advantages and disadvantages of discussing educational topics online synchronously and asynchronously is summed up well by Davidson-Rivers et al. (2001): ‘The use of chats provided a direct and interactive environment in which students reacted and responded to the topic questions at hand, chitchatted and made supportive comment sot each other. It involved a high degree of interchange and was a dynamic environment, although sometimes difficult for some students to follow the train(s) of thought. In contrast threaded discussions provide an opportunity for students to provide reflective, thoughtful responses to posed questions, judging by the length and wording of any given single response. They were also able to provide insightful opinions and ideas presented perhaps because a threaded discussion’s timeframe (of a week) allowed for that. Students enjoyed the threaded discussions because of the convenience factor.’ (Davidson-Rivers 2000: 364-5)

As with any educational decision, it is important to take into account the specifics of the particular context when deciding how to exploit CHAT. Ingram et al. (2000) point out: ‘ When using synchronous CMC, one must take care to use tasks, groups sizes, moderating techniques, and other variables that increase the probability that the resulting discussions will have educational value. Merely instructing students to discuss a topic is likely to result in short superficial topics with little educational value. However, good tasks supported by meaningful graphical environments and avatars can be highly effective. Similarly, groups of the right size that follow some simple discussion rules can produce good results.’ (Ingram et al. 2000: 34)

Burnett (2003) focuses on the need for the tutor to be well-prepared for his/her three main functions:

‘1 Social – how can tutors establish a supportive atmosphere among a group of people unable to see one another?

2 Organisational – how can tutors help maintain focus in a medium prone to multiple strands?

3 Intellectual – how can tutors actively promote discussion?’

(Burnett 2003: 250)

Burnett’s interesting article provides some answers to each of these questions.

Melanie Heard-White points out that various teaching and management strategies have been proposed as solutions to the difficulties of live, online discussions. For instance, Kuminek and Pilkington (2001) suggest differentiating each student’s message by assigning a unique colour to their text.

Another difficulty in effectively facilitating live, online discussions concerns identifying those who are inactive in the CHAT – lurkers. A tool that could dynamically provide the tutor with visual clues to student interaction, based on Babble’s “social proxy” meter has been proposed by Kuminek and Pilkington (2001) Instead of using persistent numbers of threaded synchronous and/or asynchronous conversations that participants can move between, it represents the degree of active participation in a synchronous debate. In such a debate, each participant is represented by their colour and image on their “marble”, with the colour of each marble matching the tutor’s assignment of colour viewing messages in the conversation window. When a participant sends a message their marble moves towards the centre of the circle and then drifts outwards with inactivity. This should help bring the inactive students to the tutor’s attention. The tutor can then encourage these students to participate (Kuminek & Pilkington 2001).

**4.1 Ways of using CHAT**

In this section we look at some of the more specific uses of CHAT which the literature describes as being effective.

Burnett et al (2003) argue that ‘collaborative student discussions ‘can be achieved through synchronous CMC’ if attention is paid to a number of key elements. The key elements that they describe could be summarised as:

* the need to provide a clear focus
* the need to restrict group size
* the need for participant commitment
* the need for participants to have appropriate communication skills and techniques

Scwier and Balabar (2002) emphasise above all the choice of content that ‘inspires natural debate or passion’. In other words, they are in favour of the kind of topics that might arouse vigorous discussions at dinner parties. They are in favour of having a bulletin board accompany a CHAT session both to introduce discussion materials prior to the CHAT and so that students can continue talking asynchronously after the CHAT session is completed.

The Department of Education and Training in New South Wales provides guidance for teachers on taking care with respect to the use of ordinary Chatrooms by their students. It also gives some basic guidelines with regard to using Chatrooms for educational purposes. A transcript of a chat session on the topic of the Australian School of the Air can be read at

<http://www.det.nsw.edu.au/strat_direction/strat_init/isp/chat/>

Chatrooms per se are recommended for language students. Here the teacher needs do nothing more than recommend some suitable chatrooms for their learners. The advantages of their participation in one of these are given in one web article (<http://www.esl-lounge.com/adam-simpson-chat-rooms.shtml>) as:

‘Firstly, they allow learners to interact in an authentic context with native speakers without being restricted by location. In many ways, this is an unprecedented learning opportunity. Language students can use a chat room at any time to interact with any number of people anywhere in the world.

Secondly, Chat rooms can promote learner autonomy. This is primarily due to the fact that the teacher's role is minimized. Transcripts are generated which are useful for studying the language used. Every line of conversation is ed, and can be seen in full thereafter.

Another advantage is that students have the opportunity to observe the language used by native speakers. Learners are able to see how a conversation develops, and also to notice what kinds of response are suitable (or unsuitable) in given situations.

Chat rooms also promote active involvement. The learner is enticed into conversing with others, and yet can withdraw as and when they feel like it.

Learners are also given the opportunity for skills development and practice. Chat rooms offer the learner the chance to produce language which is somewhere between everyday spoken English and the language in its written form. Many learners may not have previously been exposed to such informal written English.

Finally, they allow communication to take place in real time. This is a truly authentic communicative device. The conversations are real and the frameworks around which they are built are extremely loose. They therefore necessitate a degree of spontaneity and adaptation. Also, the sense of real time is a little more forgiving than a face to face spoken encounter. Firstly, there is that all important thinking time between seeing what the other person has written and making one's reply. Secondly, there is the factor of anonymity which potentially increases the learners' confidence.’

As reported by Melanie Heard-White, the University of Windsor in the USA has some experience of using XCHAT and its web site states that some of the most successful ways in which it has done so include:

* A weekly chat added to a course to provide interaction amongst participants.
* Instructors can hold “office hours” online and students can get immediate feedback.
* Small groups can meet regularly in a chat room to discuss the status of their projects.
* The live chats can be supplemented by email correspondence.
* Guest speakers can be invited to hold a synchronous chat session with the class.

(University of Windsor, 2004)

Following is a list of ideas for using CHAT from the University of Illinois that could be adapted for any discipline:

http://www.ion.illinois.edu/IONresources/conferencing/pedagogic.asp

‘1. **Oral quizzes:**

Have your students meet with you individually online and quiz them on course content. You can assess how well they know the material in just a few minutes of questions and answers. Using chat you can explore depth as well as breadth of your students' knowledge and understanding of the concepts. Since your students sign up for the date and time of their own quizzes (you can provide an online or paper sign up sheet), you are giving them some control and responsibility for their learning experience. This supports a very student-centered approach to teaching.

2. **"Debriefing" exercises:**

Do you sometimes worry that one or more of your students did not write their own term paper? Access to the Web has unfortunately made it possible for students to cut, paste and virtually lift entire papers at the touch of a computer key. You can use chat to debrief individual students after they turn in their assignment if you suspect plagiarism. Ask them questions about the assignment to determine if the work is really their own.

3. **Transcripts can be a Study Tool:**

After each chat session, post the transcripts to a Web page so your students can reread the conversations that took place during the chat. This offers your students an opportunity to review the discussion that transpired and gives those who were not present a chance to know what took place.

4. **Language Study:**

Use chat transcripts for grammar practice in language courses. For example, the dialog can be rewritten from direct to reported speech, or sentences can be analyzed for grammar, spelling, or vocabulary practice. This provides your students language practice on authentic texts since the conversations are real and the students themselves are the participants.

5. **Brainstorming Sessions:**

Students brainstorm as warm up activities for writing assignments. This can function as a pre-writing phase for the rough draft of a paper.

6. **Small Group Work:**

Break your class into small groups of 3-5 students and have them schedule chat sessions to work together on a project. They can meet online at the onset of the project to discuss the assignment, determine a strategy for working together, divvy up the work, and brainstorm ideas.

7. **Guest Speakers:**

Invite a guest to your course chat session (an outside expert, another instructor, etc.) and tell your students to come prepared to ask the guest questions. This activity provides your students with information about real world experiences concerning the course subject matter.

8. **Virtual Office Hours:**

Set weekly times where you are available online so your students can contact you about the class. If you anticipate more than 5 students wanting to attend your virtual office hours, schedule time slots they can sign up for so the chat sessions don't become crowded. ‘

**4.2 Suggested strategies for** **using CHAT**

The following two suggestions are recommended at:

<http://users.chariot.net.au/~michaelc/mfo/ed_chat.htm>

**‘Greeting Students**

once the chat (lesson) has begun it is best if only the facilitator greets any latecomers; likewise if people leave early. A stream of hellos or goodbyes can be quite disruptive to the flow of a chat (lesson).

**Gaining Attention**

though some may consider it impolite I use CAPITAL LETTERS TO GAIN EVERYONE'S ATTENTION. So if you see me typing in capitals please finish your message and await further input from the facilitator.’

The guidelines for learning delivery via CHAT, as outlined below, will go some way to providing a user friendly CHAT service. Many are based on the methods used by Melanie Heard-White during her teaching by and about the use of CHAT in Online Education & Training courses at the Institute of Education.

**4.3 Technical Requirements For Teaching Via Chat**

To assist with the technical running of CHAT seminars it is recommended that the CHAT service should:-

* + - Be accessible through a web browser and there should be no need to download special software.
* The CHAT room should be password protected to bar ‘uninvited guests’
* Students should be able to ‘invite’ themselves in to the CHAT room thereby allowing the lecturer to concentrate on the lesson.
* Facilities to exit the main session and enter one-to-one CHAT rooms (thereby facilitating pair work and small group work) should be provided.
* It should be possible to set up a transcript of the session.

Connection issues remain. In the event of a breakdown, seminars may have to be re-scheduled. Due to reactions to virus attacks and blocked access to CHAT by some providers, students might choose to access CHAT from cyber cafes.

Additional elements that will assist in minimising CHAT technology problems include:-

* A back-up CHAT service
* Remote technical support
* A whiteboard connected to the CHAT service
* Broadband.

For example, FirstClass provides many of these features, though a disadvantage here is that the lecturer has to monitor two screens simultaneously, which can be difficult when coping with a live lesson at the same time. CHAT Forum provides an effective service for running CHAT seminars and students can gain entry to the CHAT virtual classroom by typing in their passwords themselves. See further comments about software below.

The following sections explore how to teach via CHAT. This will include examining technical requirements, lecturer preparations, the role of the tutor, common teaching methods employed and the survey responses of students for whom CHAT has been the focal activity of the learning process.

**4.4 Preparations for Teaching with Chat**

## Preparations undertaken by the lecturer when teaching via CHAT include: -

# Enrolment of twelve students. This is the maximum that can be effectively taught at one time.

* Install the CHAT service on the website.
* Set up a website and store information. Course materials and transcripts etc. should be accessible 7/24.

## Email students the information about access to the CHAT room and their individual password prior to the course.

## Provide the option of a time to meet students in the CHAT room before the course for a test run and insert G.M.T. (Greenwich Mean Time) into instructions relating to meeting times.

* Circulate a virtual seating plan in advance of the first session to students. [See picture below.]
* Minutes before the commencement of the seminar the tutor should set up a transcript of the session.



Useful tips when preparing to teach via CHAT include:-

* Prepare to use the Copy, Paste and Save commands when preparing the lesson content, so that lecture notes/ set texts can be introduced into the lesson when required.
* Email to the students the lesson any worksheets or sections of aamy text book to be read, well in advance of the CHAT lesson.
* Prepare in advance, and be ready to use frequently, a variety of messages giving praise, encouragement as well as brief jokes. These elements can too easily be over-looked under the pressure of delivering a live, online seminar.
* Instruct students to have their comments typed and ready to send.

**4.5 The Role of the Tutor**

The tasks performed by the lecturer when teaching a live CHAT seminar include:

* + - Group leader (controls and directs lesson content and pace),
		- Expert (answering commonly asked questions)
		- Facilitator (of discussions),
		- Helper (prompter, offers alternatives),
		- Social organiser ( helps develop peer relationships and group bonding).

Tasks performed before and after the lesson, by the lecturer, include that of: manager (of the course materials and the transcripts of each session) and marketer (promoting and explaining the course to potential students).

**4.6 Teaching Methods in a CHAT Seminar**

Aspects of teaching commonly used during a live CHAT seminar include:-

* Project based instruction
* Short research project instruction
* Case study instruction
* Information retrieval
* Question and answer sessions
* General discussion
* Facilitating group work
* Facilitating pair work (in separate CHAT rooms)
* Eliciting information
* Brainstorming
* Facilitating group feedback on coursework
* Providing tutor feedback on coursework.

At the start of the first three CHAT seminars of any longer course, it is useful to establish and then reinforce ground rules for the lesson. The most useful to include are:

* A maximum of three sentences constitutes any person’s turn.
* The hash symbol # must be used to show when a turn is being ended.
* If a person has no comment, s/he must type ‘PASS’.
* The tutor should respond after each student’s contribution (and thus takes a firm role in directing the discussion and maintaining control)
* All discussions should proceed in the virtual seating order.

The rotational turn-taking is a particularly useful class management tool for CHAT. Combining rotational turn-taking with a visual seating plan encourages orderly and coherent interactions. Thus time is not wasted, the momentum of the seminar is maintained, everyone is able to participate, and individual students do not feel excluded. It can also provide students with a short valuable thinking period before they have to comment. Other benefits of rotational turn-taking, as outlined by Dobbs & Grieve’s (1985) investigations into online task related and group procedural input, suggest that the use of rotating moderators increases decisional productivity. Further investigations by Dobbs and Grieve (1985) revealed increased participant satisfaction when turn-taking protocols were implemented in online synchronous groups.

It is this combination of the multi-tasking by the lecturer and the variety of teaching methods employed during a CHAT seminar that contribute to the interactive nature of the lesson and encourage student centred learning.

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

In general we strongly agree with Davidson-Rivers et al. When they state that ‘Both discussion modes – online chats and threaded discussions – warrant use within online courses. They clearly can be used for different purposes and provide different but useful means for students to engage in discussion and learning’. (Davidson-Rivers et al. 2000: 365)

We begin this section by reporting further on the surveys carried out as part of this project into the extent to which CHAT is already used in Higher Education in the United Kingdom. Our report on these surveys is presented in blue below.

**5.1. Some views from UK academic staff about the use of CHAT**

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.

**5.2 The Use of CHAT by Respondents - General**

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%).

**5.3 Technology problems**

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.

**5.4 Use of CHAT in teaching and learning**

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.

**5.5 Comparing CHAT with other Communication Media**

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.

**5.6 Why people currently use CHAT**

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

**5.7 General Comments**

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.

**5.8 Conclusions**

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.

**5.9 Some views from students with experience of using CHAT as an integral part of an online course.**

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

**5.10 Some views from campus based students on the use of CHAT**

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.

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.

Based on her own considerable experience of using CHAT Melanie Heard-White recommends the following procedures.

The tutor and students should have been sent a virtual seating plan in advance, . Students’ comments on a certain subject have been requested, in rotation, by the tutor. Each student has a short thinking period before it is their turn to comment. They know when it is their turn to respond by referring to the seating plan. Their thoughts therefore have to be logically organised and coherent. They have got into the routine of having their responses typed and ready to send when it is their turn, so as not to cause delay. All the participants therefore experience a degree of pressure to contribute to the discussion and have been provided with thinking time before making their comments.

Melanie Heard-White points out that his kind of procedure is particularly beneficial to students as most assessments require writing skills. CHAT lessons are composed of written texts. This extra practice in organizing, focusing and expressing one’s thoughts in clear and logical written form can be of great value to the learner. (This method of improving written skills can also be applied to the lecturer).

Indeed the advantages of using CHAT in connection with global education and students learning in a second language becomes even more apparent when one considers that most people are better able to write in a second language than to speak (Mason, Technologies for teaching at a Distance p.2 Internet notes).

A major advantage of CHAT is that transcripts of CHAT lessons provide an accurate of each lesson, including all points raised during discussions and by whom. There is no need for hand-written notes. Students are freed up to focus on the subject matter, to concentrate on thinking and reflecting with the knowledge they can refer back to previous materials at any time. Moreover, learners can readily catch up on missed seminars.

These transcripts of the lesson, and the knowledge that classroom remarks are being ed, can also help to focus discussions and prevent them degenerating into triviality. It is therefore essential that the software allows the teacher easily to keep transcripts of all CHAT sessions and that students are aware that this will be happening on a systematic basis.

In the table below Melanie Heard-White lists some specific teaching problems that may occur when using CHAT and suggests how to overcome them.

# TEACHING PROBLEMS SOLUTIONS

Reading scrolls of computer text Vary learning activities, i.e. lecture/

is tedious. Discussion/individual work/question/

 Answer/critical reading of worksheets/

 Quizzes/pair work in chat room

Large groups of students ‘chatting’ Limit groups to 12 maximum.

can become confusing for those who Provide a virtual seating table

cannot follow several streams of and ask students to comment in

thought at once.And it is difficult to rotation. Alternatively, the tutor

co-ordinate a session where all students specifies whose turn it is to respond

 can participate (due to time differences and responds after each student.

etc). thus directing the lesson

Speed of sending/receiving message. Present as providing thinking time.

Lecturer on broadband/provides

additional thinking time in relation to student’s responses

Public access to CHAT rooms Introduce password protected CHAT Rooms.

Students accessing CHAT Send out clear written instructions

Room. beforehand. Tutor and students

agree to meet in CHAT room10 minutes prior to first lesson, to sort out acesss problems. Provide remote technical support.

Transcripts Essential that a transcript is generated

 alongside CHAT.

Loss of transcripts due to tutor Request students also generate a

being dropped from server transcript

Tutor dropped from server Use back-up.

Disconnection from the system Go through re-connection process

Student dropped from server Provide remote technical support

Disconnections from the system Go through re-connection process

Lack of voice intonation Not generally a problem. ☺ substitute.

And body language can lead to Instructor/learner has the

Misinterpretations re: general opportunity to request immediate

comments clarification.

Synchronicity of time is The tutor may have to schedule

a constraint and can hinder CHAT sessions at different times

online members in different time of the day to accommodate this.

zones to interact or collaborate at

the same time.

Culture and language constraints The instructor or learner has the

can lead to communication difficulties opportunity to ask for immediate

and misunderstandings in online clarification.

communities (Wenger et al 2002).

**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. The following list and comments are from

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

**‘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.’

**FreebieList.com** provides a long list of free software.

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

**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.

**7 Future plans**

We are planning to expand this report into one or more publications, so as to highlight examples of good practice [or the reverse] and would very much appreciate hearing from people who have experience of the use of CHAT either as learners or as teachers. Any information or data that we include in our publications, will be fully acknowledged.

Please send any relevant material to Anita Pincas

a.pincas@ioe.ac.uk.

Thank you.

**8. POST SCRIPT March 2006**

Since this project ended, there has been a considerable increase in available CHAT facilities, and consequently in its use. Thus, VLE’s such as Blackboard include CHAT areas, and software such as

Adobe [formerly Macdromedia] Breeze <http://www.macromedia.com/software/breeze/>

or Elluminate <http://www.elluminate.com/>

also use it alongside audio and video options.

Nonetheless, it seems that the pedagogy for effective management of the environment is still not well established.

**9. References**

***Please also see Appendix 2 for a set of useful abstracts and further bibliographic references.***

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

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<http://www.det.nsw.edu.au/strat_direction/strat_init/isp/chat/>

Felix Uschi The web as a vehicle for constructivist approaches to language teaching ReCALL Vol 14 no 1 pp 2-15 2002

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

Freiermuth, Mark Internet Chat: Collaborating and Learning via E-Conversations TESOL Journal Vol 11, no 3, pp. 36-40 Autumn 2002.

**Note:** This has some useful information on software.

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An ESCalate project, <http://www.escalate.ac.uk/1040>

Simpson Adam The Internet Chat Room as a Learning Tool.

http://www.esl-lounge.com/adam-simpson-chat-rooms.shtml

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<http://users.chariot.net.au/~michaelc/mfo/ed_chat.htm>

User’s comments on CHAT. See Appendix 1

**H. Bibliography of Abstracts and references relevant to CHAT**

**Educational Research Abstracts Online**

**ERIC references**

See Appendix 2