

Review of Windows NetMeeting 3.01

Version	3.01
Publisher	Microsoft
Licence	Free
Basic system	• Windows 95/98/Me/NT/2000/XP
requirements	Internet Explorer 4.01 or later
	• 56,000 bps or faster modem, ISDN, or LAN connection
	Sound card with microphone and speakers
Download size	1.6 MB
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Reviewed by Yuping Wang

1 Introduction

Along with the rapid developments in Information and Communications Technology in recent years, an urgent and significant issue has emerged, and has challenged distance language teaching professionals; the provision of a more authentic learning environment in which real-time and synchronous interaction and collaboration is an integral part of the learner's learning experience. Interaction and collaboration have become catchwords in second language (L2) acquisition theories and practices. Vygotsky, commonly regarded as the founder of the sociocultural theory, emphasizes the creation of "the zone of proximal development" by "interacting with people in his [the learner's] environment and in cooperation with his [the learner's] peers" (1978, p. 90). Long's (1981, 1983, 1996) Interaction Hypothesis also holds that "a crucial site for language development is interaction between learners and other speakers, especially, but not only, between learners and more proficient speakers", and particularly important is "the negotiation of meaning that can occur more or less predictably in certain interactions" (Long & Robinson, 1998, p. 22). Halliday (1978, 1993), from a sociolinguistic perspective, sees "context of situation" as "an essential ingredient" in language building. Stemming from these communicative learning theories is task-based learning with an emphasis on learning the meaning of the language and on the authenticity of the learning materials and environment (see Nunan, 1989; Long 1988; Skehan, 1998). All these theories are essential to effective language acquisition and have been proven more or less valid in traditional classroom practices. However, due to the existence of physical distance between the learner and education provider, face-to-face interaction, collaboration and authentic learning environments have been traditionally lacking and still present challenges to L2 teaching and learning in distance mode. It is with this understanding of L2 learning theories and the needs of distance language learners in mind that the evaluation of NetMeeting was approached.

2 What is NetMeeting?

NetMeeting is an Internet-based one-to-one desktop videoconferencing tool developed by Microsoft, with 3.01 being the latest version. It offers features of potential pedagogical value such as video, audio, whiteboard, file transfer, desktop sharing, self-view video and text chat (see Fig. 1). NetMeeting is now included in Windows 2000 and Windows XP. For other Windows users, it can be freely downloaded from http://www.microsoft.com/windows/netmeeting/download/default.asp. With its simple and distinct interface design, NetMeeting is very user-friendly, as the

audio and video will turn on automatically when a connection has been established. It is free and users need only purchase a web camera for about US\$50 and a headphone for about US\$20.

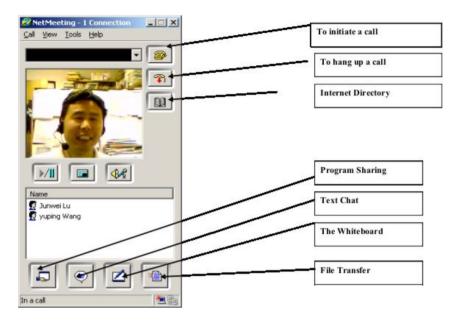


Fig. 1: The interface of NetMeeting

2.1 Audio and video in NetMeeting

With a broadband connection, NetMeeting can achieve a consistent and high audio and video quality. A one-to-one synchronous dialogue or role play, much like face-to-face interaction in a traditional classroom, can be conducted through the video and audio functions. These functions not only enable both parties to hear each other in real-time but also allow them to view each other's body movements above the shoulder, facial expressions, lip movements and hand gestures. Such interactions are possible between the teacher and the learner, where the learner can receive immediate and personalized feedback about his or her performance, or between learners themselves, where they can learn from their peers, "a crucial site for language development" (Long & Robinson, 1998, p. 22).

Collaborative learning is especially crucial to distance learners who are often deprived of a learning community due to physical distance. In the promotion of collaboration and peer learning, NetMeeting can also be used outside class time by learners themselves for collaboration in real time. For example, distance language learners can meet online regularly to complete various tasks in the target language. Such collaborative learning is not only conducive to their language acquisition. It also supports the process of building a learning community for isolated learners.

2.2 Whiteboard in NetMeeting

The on-screen whiteboard (see Fig. 2) offers another interactive space with many functions that traditional whiteboards in classrooms do not have. Apart from offering basic features such as a pen with four types of width, a highlighter, different text colours, an eraser and a zoom function, it also allows the user to cut and paste information from any Windows-based application onto the whiteboard. Both parties engaged in the conferencing can view, write, edit and draw simultaneously. The whiteboard therefore provides an ideal platform for the negotiation of meaning in task completion as well as constructive learning. In addition, the whiteboard can be especially useful

for teaching scripted languages such as Chinese and Japanese as the stroke order of a character can be shown step by step in real-time.

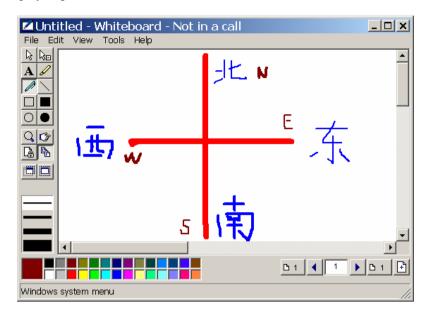


Fig. 2: Whiteboard in NetMeeting

2.3 File transfer in NetMeeting

To promote authentic and contextualized task-based learning, the teacher or learner can use the file transfer function (see Fig. 3) to send video, sound or text files to the other party so that a spontaneous conversation in the target language can be generated about the contents of these files. These files can be kept by the receiving party for future use. Whereas the transfer of text files is instantaneous, the transfer of video files takes longer.



Fig. 3: File transfer in NetMeeting

2.4 Program sharing in NetMeeting

With the program sharing function (see Fig. 4), users can share multiple programs open in the background during a NetMeeting conference. Unlike the whiteboard, this function does not allow the other party to edit the files, thus giving greater control of the original document. This function

is useful for the presentation of a prepared document, be it a PowerPoint slide, a photo, or a web page.



Fig. 4: Sharing in NetMeeting

2.5 The self-view window in NetMeeting

The self-view window is a picture-in-picture window (see Fig. 5) which allows users to see themselves while they are engaged in a conference with another party. It can be positioned anywhere on the computer screen. Teachers and learners can use it to monitor their performance during task completion, and use paralinguistic cues for better negotiation of meaning. For example, if one does not understand the other party's input, one may look puzzled.



Fig. 5: Self-view window in NetMeeting

2.6 Text chat in NetMeeting

The text chat (see Fig. 6) allows the user to conduct synchronous conversations using written text with any number of people. It therefore offers an interactive space to improve second language learners' writing and reading skills. This function supports a variety of languages, such as English, Chinese, French, Italian and Japanese. It can also be used as a backup resource in case of technical problems with the audio or video. That is, users can still communicate with each other through written text even if they cannot see or hear each other.



Fig. 6: Text chat in NetMeeting

2.7 Remote desktop sharing in NetMeeting

The remote desktop sharing function (see Fig. 7) allows users to view and operate a remote computer desktop. This is particularly useful for distance learners, as the teacher can demonstrate the use of a certain function or tool without having to be physically with the learner.



Fig. 7: Remote desktop sharing in NetMeeting

3 Limitations

3.1 Software limitations

As mentioned above, NetMeeting is a one-to-one conferencing tool. It is therefore not suitable for subject delivery to a large group of learners.

3.2 Hardware limitations

There are also some technical issues that the user should be aware of when using NetMeeting. First, the audio and video quality is often subject to Internet conditions. At peak Internet times, using a dial-up connection, the sound and video quality can be inconsistent and unstable. It is therefore recommended that online sessions be arranged early in the morning or during weekends, and that broadband be used instead of dial-up. Second, a high performance computer is preferred for better sound and video quality. Third, if used in an institution, users may encounter problems with a firewall, which often blocks the video for security reasons.

4 Summary

NetMeeting is only one of many videoconferencing tools available. Its potential for fostering learners' communicative and collaborative skills aligns it closely with prevalent second language learning theories emphasizing interaction, collaboration and an authentic learning environment. The effective use of NetMeeting to promote distance language learning depends on the objectives of the learning activity.

References

Halliday, M.A.K. (1978). Language as a social semiotic. London: Edward Arnold.

Halliday, M.A.K. (1993). Towards a language-based theory of learning. *Linguistics and Education*, 5(2), 93-116.

Long, M.H. (1981). Input, interaction, and second language acquisition. In H. Winitz (Ed.), Native language and foreign language acquisition. Annals of the New York Academy of Sciences (pp. 259-278). New York: New York Academy of Sciences.

Long, M.H. (1983). Does second language acquisition make a difference? A review of research. TESOL Quarterly, 17(3), 359-382.

- Long, M.H. (1988). Instructed interlanguage development. In L. Beebe (Ed.), *Issues in second language acquisition: multiple perspectives* (pp. 115-141). New York: Newbury House.
- Long, M.H. (1996). The role of the linguistic environment in second language acquisition. In W.C. Ritchie & T.K. Bhatia (Eds.), *Handbook of research on language acquisition. Vol.2: Second language acquisition* (pp. 413-468). New York: Academic Press.
- Long, M.H., & Robinson, P. (1998). Focus on form: theory, research and practice. In C. Doughty & J. Williams (Eds.), Focus on form in classroom second language acquisition (pp. 15-41). Cambridge: Cambridge University Press.
- Nunan, D. (1989). Designing tasks for the communicative classroom. Cambridge: Cambridge University Press.
- Skehan, P. (1998). A cognitive approach to language learning. Oxford: Oxford University Press.
- Vygotsky, L.S. (1978). *Mind in society: the development of higher psychological processes*. Cambridge, MA: Harvard University Press.