Promoting Critical Thinking in Language Learning
Through Computer-Mediated Collaborative Learning:
A Preliminary Investigation

Janpha Thadphoothon

B. Ed., Chulalongkorn University (First Class Honours, 1992)
Advanced Certificate in TEFL, RELC (1999)
M.A., Thammasat University (2000)

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School of Languages and International Studies and Tourism, Division of Communication and Education, University of Canberra
Australia
DECLARATION

Except where due acknowledgement has been made in the text to other material, I certify that I am the sole author of this thesis submitted, entitled:

PROMOTING CRITICAL THINKING IN LANGUAGE LEARNING THROUGH COMPUTER-MEDIATED COLLABORATIVE LEARNING: A PRELIMINARY INVESTIGATION

The length of this thesis, exclusive of the abstract, the preface, acknowledgements, tables, figures, references, and appendices, is less than 70,000 words.

Signed

Janpha Thadphoothon
August 2005
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ABBREVIATIONS

The following abbreviations are used in this study:

- CI: Coordination Index
- CL: Cooperative/Collaborative learning
- CLT: Communicative Language Teaching
- CMC: Computer-Mediated Communication
- CMCL: Computer-Mediated Collaborative Learning
- CT: Critical Thinking
- DPU: Dhurakijpundit University
- ELICOS: English Language Intensive Courses for Overseas Students
- EFL/ESL: English as a Foreign/Second Language
- ELT: English Language Teaching
- GFI: Gunning Fog Index
- ICT: Information and Communication Technology
- TESOL: Teaching English to Speakers of Other Languages
- TTR: Type-Token Ratio
- UC: University of Canberra
- ZPD: Zone of Proximal Development
This thesis proposed a framework for conceptualizing critical thinking in language learning. A learning environment where collaborative learning and network technology were combined – computer-mediated collaborative learning (CMCL) – was set up. The main aim was to study the potential of the learning environment in promoting critical thinking (CT) in language learning. The proposed framework of CT in language learning had three aspects: (1) communication, (2) reasoning, and (3) self-reflection.

The study was a qualitative one that took place between June 2003 and January 2004. Three case studies were undertaken that involved up to 90 participants, comprising students, teachers, volunteers, and the researcher. All were members of an online learning community, the Bamboo Enterprise. Students worked in groups that investigated environmental problems. The student projects were grouped into three case studies: (1) Using Collaborative Environmental Projects to Promote Communicative Language Learning and Computer Skills, (2) Using Environmental Themes in Computer-Supported Cooperative Learning to Prepare ESL Students for Academic Study in the Australian University Environment, (3) Promoting Communicative Language Learning Through Computer-Supported Cooperative Learning. Findings were based on analyses of five sources of data: (1) interviews with the student participants; (2) teachers’ comments and opinions; (3) questionnaires; (4) students’ overall group work; and (5) online discussions.

The investigation found that, overall, the CMCL environment with its particular framework had the potential to promote CT in language learning. However, it had both strengths and weaknesses. The strengths were that it promoted the communicative use of English, encouraged critical thinking in action, and extended the students’ potential to learn a second language. It also encouraged the appropriate use of technology. More importantly, this CMCL environment showed itself to be a viable method of learning and one in which both students and teachers can be empowered. However, along with these advantages, some avenues for improvement were evident. The study found that the students’ grammatical accuracy was low, despite their rich vocabulary and ability to use complex language structures. Some
students found working in groups challenging and some never acquired the necessary web skills. Access to the Internet was not always adequate for this type of project. In sum, the students needed more support, especially at the task level, when using this method of language learning.