

# Another Look at Convergent and Divergent Tasks: Evidence from Synchronous Computer-Mediated Communication

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## Overview: A Pilot Study

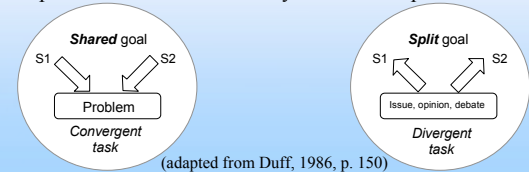
This pilot study examined learner discourse during convergent and divergent tasks in chat sessions conducted using Moodle course management software in an EAP course in Japan. While the interactional and linguistic outcomes of convergent and divergent tasks in synchronous computer-mediated communication (SCMC) appear similar to those observed in face-to-face research (Duff, 1986), an end-of-term questionnaire indicated that there were differences in participants' affective responses to electronic and face-to-face discussion.

## Task-based SCMC

Research on task-based SCMC has focused on describing learner interaction (Pellettieri, 2000) and identifying task types that foster negotiation (Blake, 2000; Smith, 2003). This research, building on the existing literature (Varonis & Gass, 1985; Pica, *et al.*, 1993), tends to advocate convergent tasks as a way of encouraging negotiation. Others, however, view tasks in SCMC differently, concluding that less convergent tasks support reflection and validate interpersonal engagement (Lamy, 2007). Further, learner responses to SCMC tasks are rarely addressed.

## Purpose of the Study

...to investigate performance in *convergent* and *divergent* task conditions, which differ in terms of the goal orientation learners are expected to have and to survey students' responses to SCMC



## Participants & Procedures

Participants in this study were Japanese L1 speaking female 2nd-year English majors enrolled in an EAP course ( $n = 19$ ). All participants had taken a computer literacy course and were familiar with Moodle. Their average score on the TOEIC® Bridge IP test was 159 ( $SD = 8.1$ ). Pairs conducted 2 chat sessions, 5 weeks apart, in a computer classroom where meetings were held weekly. Each session lasted 20 minutes. Data were collected from the chat logs. Before the sessions, the instructor gave a verbal explanation and passed out task sheets.

## Task Instructions

### Convergent

You and your partner are on the university admissions board. Based on the 4 applicant profiles, accept 2 candidates into your department and give reasons for your choices.

### Divergent

Partner A: You must defend the opinion that "Having a job you love is important"  
Partner B: You must defend the opinion that "making a lot of money is important"

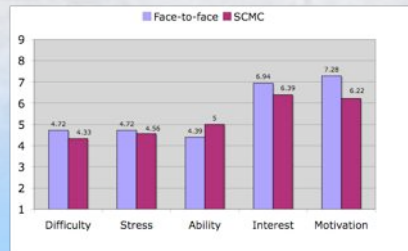
## Measures

1. The average number of words and turns by participants
2. Words per turn (WPT) -- the sum of the average number of words in all participants' turns divided by participants
3. Referential questions, comprehension checks, clarification checks, and confirmation checks -- chat logs coded by two trained raters reaching 92% agreement
4. Difficulty, stress, ability, interest, motivation -- assessed using 9-point Likert-scale items at the end of the semester

## Summary of Results

		Total	Mean	SD
Words	Convergent	1141	71.31	25.96
	Divergent	1352	84.50	25.84
Turns	Convergent	225	14.06	8.29
	Divergent	166	10.37	5.28
WPT	Convergent	97.36	6.08	2.58
	Divergent	153.76	9.61	4.28
Questions	Convergent	51	3.19	2.01
	Divergent	14	0.88	0.89

## Learner Responses



## Discussion

The different outcomes of convergent and divergent SCMC tasks allow different classroom practice opportunities. However, due to limitations in this study, it is suggested that researchers:

1. Design research to distinguish these task conditions and complexity variables, such as reasoning (Robinson, 2007)
2. Counterbalance tasks to improve internal validity
3. Survey learners after task completion to study the effects of task versus modality on motivation/interest