A Pilot Study of Students' Attitudes Toward and Desired System Requirements of Networked Peer Assessment System

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Abstract
This study applied NetPeas (networked peer assessment system) in peer assessment activities of graduate level of thesis writing course. Authors wish to discover the students' attitudes toward and desired system requirements of NetPeas in writing course. This study involved 100 electrical engineering graduates from two research-oriented universities at northern Taiwan. Those students were required to attend a weekly thesis writing course and submit eight assignments through four rounds of networked peer assessment, and then authors survey their attitudes and opinions toward NetPeas. In the last, quantitative and qualitative surveys indicated that significantly more students willing to join the networked peer assessment activities via NetPeas in the near future and stand for using NetPeas. Authors also have dug several desirable requirements for NetPeas.

Keywords: NetPeas, networked peer assessment system, peer assessment, thesis writing course

Introduction
Among many alternative assessment methods developed in recent years include extensive use of concept mapping, peer, cooperative and portfolio assessment [1, 2]. This study illustrates the use of networked peer assessment system (NetPeas, referred to 1) in a thesis writing course with same background students. Peer assessment, a natural process used from childhood onwards to evaluate peers, has been extensively studied in higher education in recent decades. Researchers have explored the validity, reliability and practicalities of peer assessment and generally conferred on its acceptability. However, the exploration of students' attitudes and desired system requirements of applying networked peer assessment to thesis writing course has seldom been explored.

If this research would find meaningfully desired system requirements for NetPeas, then the adaptability and receptiveness of NetPeas would be increased in the near future after revising NetPeas according to students' desired system requirements.

Results
Analysis of students' attitudes toward NetPeas

1) Willingness to join networked peer assessment activities via NetPeas in the near future: Question 1 showed that 69% (Chi² = 14.44*** ) of the students willing to join networked peer assessment activities via NetPeas in the near future. Feedback from structured interview indicated that majorities of student see networked peer assessment effective and they benefited from using this learning strategy. 2) Satisfied with NetPeas in sum: Question 2 showed that 77% (Chi² = 29.16*** ) of the students satisfied with NetPeas in sum. 3) Ease of use in submitting an assignment via NetPeas:
Question 3 also showed that 77% ($\chi^2 = 29.16^{***) of the students agree with that submitting an assignment via NetPeas is easy. 4) Satisfied with the presenting interface of assignments: Question 4 also showed that 91% ($\chi^2 = 67.24^{***) of the students satisfied with presenting interface of assignments. 5) Ease of use in assessing peers' assignment: Question 5 showed that 69% ($\chi^2 = 14.44^{***) of the students agree with that assessing peers' assignment via NetPeas is easy. 6) Satisfied with the presenting interface of reviewers' evaluation: Question 6 showed that 81% ($\chi^2 = 38.44^{***) of the students satisfied with the presenting interface of reviewers' evaluation.

Analysis of students' desired system requirements of NetPeas

There are 100 qualitative opinions of desired system requirement, but we selected only 34 (34%) meaningful opinions for this study. In these meaningful opinions, there were 15 (44%) opinions about their needs of submitting documents in Microsoft Word other than HTML file format. There were also 14 (41%) opinions about their needs of marking sentences in different colors to distinguish the wrong sentences from those correct ones. This problem could be solved perfectly by allowing students to use the Microsoft Word, because Microsoft Word provided the function of marking the amended sentences. Only 5 (15%) opinions suggested to increasing the number of files in NetPeas's submission form. Under our investigation, results demonstrated that some students need to upload a lot of figures (e.g. bitmap files) in order to illustrate their formula, system architecture and steps of experiment.

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References