This is an on-going research. The purpose of this study is to examine the on-line reinforcement effectiveness of improving Japanese language students’ writing abilities by applying Web-based, computer-oriented remedial instruction. Specifically, the influence of peer-evaluation in writing instruction on students’ writing performance and attitudes towards on-line writing system will be investigated. This study will use experimental research as well as survey questionnaires to investigate various learning factors of students who took the second-year Japanese language classes at one Institution of Technology (about 50 college students) during the fall semester of 2005. All students will receive four months of remediation. The data obtained from the sample will be analyzed and reported using descriptive and inferential statistics.