This paper presents the pilot study of the acquisition of sociolinguistic variation by advanced Ukrainian-as-second-language (UL2) learners, enrolled in their undergraduate studies in a western Canadian university. In particular, it researches the impact of various linguistic and extralinguistic factors on the learners’ ability of learning and using the Ukrainian vernacular variants in situations involving different levels of formality. The ability to adjust speech register to the situational formality is one of the keys for UL2 learners to enter successfully into authentic interaction with native Ukrainian people and be adequately approached by them. In the study Ukrainian students’ vernacular vocabulary is referred to as sociolinguistic variation and is represented by three kinds of socially and stylistically marked variants: marked informal, mildly marked informal and formal. The vocabulary under research is related to the realia of students’ life in Ukraine and covers the topic “University Studies.” A set of materials, involving the study and practice of sociolinguistic variation, was implemented during advanced Ukrainian classes for two weeks. Prior to the pilot experiment, the learners completed a language background questionnaire. The data generated by these questionnaires were used as independent variables in an analysis that correlates these variables with learners’ use of marked informal/ mildly marked informal/ formal variants of the vernacular vocabulary under study. A pretest, and an immediate posttest were administered to the learners in order to measure their ability to recognize and produce socially appropriate language considering the register, or level of formality. Receptive and productive written measures were used to assess acquisition of the target items. Quantitative analyses were performed on data obtained from questionnaires, pre- and post-tests.