ADAPTING STATISTICS EDUCATION TO A COGNITIVELY HETEROGENEOUS
STUDENT POPULATION

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Historically, the introductory course in statistics at the Norwegian University of Life
Sciences (NMBU), has been lecture based. Previous study at NMBU concluded that the course
structure apparently disfavored certain cognitive types. Therefore the course was restructured into
a student active learning course using flipped classroom. Output variables like exam scores,
colloquium attendance and student evaluations were analyzed in light of cognitive information on
the students as collected by an education test provided by the National Centre for Science
Recruitment. One of the main findings shows that the previously negative effect of extraversion
(E) disappeared in the flipped classroom course. In this paper we present several findings that
indicate that additional adaptations should be made to reach an even wider group of the
heterogeneous student mass.