Approaches to Learning
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Rationale
Recently, the workload of the EPFL first year students is suspected to affect their learning quality. The Approach and Study Skills Inventory for Students (ASSIST) by Entwistle is a questionnaire that classify one’s approach to learning as superficial, deep or strategic. Deep approach is usually correlated with high achievers on exams and surface approach is associated with poor results.

The workload and the stress are suspected to drive the students to a surface approach. Knowing some factors well correlated with a specific approach would provide an insight on what could drive a student toward one or another.

Finally it would later help increase the pool of students who really understand what they learn and provide them the solid bases they will need all along their cursus at EPFL and further.

Methods
This study administrated an augmented translated in French version of the ASSIST Entwistle questionnaire to EPFL first-year students.

This modified ASSIST model validity was then assessed using a Confirmatory Factor Analysis with LISREL©.

Finally, the correlation between our factors and the different approaches to learning was extracted from the one hundred and seventy questionnaires collected from EPFL first year students.

Results and implications
• The confirmatory factor analysis validates the factor structure of our translation of ASSIST Entwistle.
• Our data suggest that video material are thought relevant by superficial learners but not by deep learners. Surface learners also seemed interested in access to previous years material (α=0.05). Although is was not significant at 5 percent, the need for personal tutors was positively linked to surface learners and negatively to deep learners.
• Stress related to workload is more correlated with surface than deep approach. We thus hypothesize that students who feel overloaded tend to memorize instead of trying understanding underlying concepts.

“surface approaches were related by students to excessive workload”
Entwistle & Ramsden, 1983

References


More about this study
This study was completed by EPFL Master students as part of a Social and Human Science course called How People Learn II. We would like to thank Pr. Giordano Favi, Pr. Thomas Mountford and Pr. Hoài-Minh Nguyên for letting us give our questionnaires to their classes and for the interest they had towards our research. We also want to thank Lukasz Kidzinski for helping us with statistics.

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