Student motivation: A key predictor of a positive remote learning Experience/perception

This analysis uses data from our recent Remote Learning Survey to identify the best predictor of students' *remote learning experience and perception* (henceforth *RLEP)*. Over 4,500 NU students (74%) participated in the survey. We used Exploratory Factor Analysis to construct an indicator of RLEP based on 12 key survey items. We then classified each student as having a positive or negative RLEP. Finally, we used data mining algorithms to determine which single factor (among 21 candidates) best predicts RLEP.

Motivation (i.e., the extent to which students experienced/perceived it as a challenge) emerged as the single best predictor of RLEP. This factor alone predicted whether the student had a positive or negative EPRL with a 72% accuracy. Motivation had been identified as a major challenge by 52% of the students (with 31% identifying it as a minor challenge and 17% as not being a challenge). A large proportion of undergraduate students, more particularly, had identified it as a major challenge (Figure 1).

## Figure 1. Percent of students who perceived motivation as a "major" challenge to remote learning

Lack of motivation for online learning was a major challenge for undergraduate students: 3 in 5 students identified as such. Less than a third of graduate students perceived it to be a major challenge.
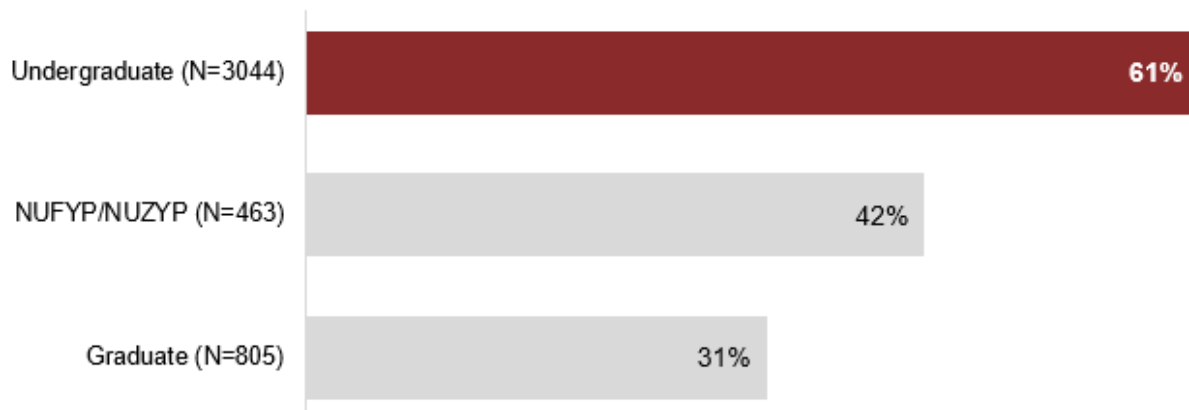
As Figure 2 suggests, the probability of having a positive RLEP was substantially low for students who had identified motivation as a major challenge: only 33% of these students had a positive RLEP. Undergraduate students accounted for two-thirds of this group and were, consequently, a lot less likely to have a positive RLEP compared to other students. In fact, only 42% of undergraduate students (vs. 74% graduate and 82% CPS students) had a positive RLEP.

Figure 2. Percent of students with a positive remote learning experience/perception, by level of motivation

Only a third of the students who experienced a major challenge with motivation had a positive remote learning experience/perception (and undergraduate students accounted for 67% of this group!).

No motivation challenge (N=707)	88%
Minor motivation challenge (N=1313)	69%
Major motivation challenge (N=2289)	33%
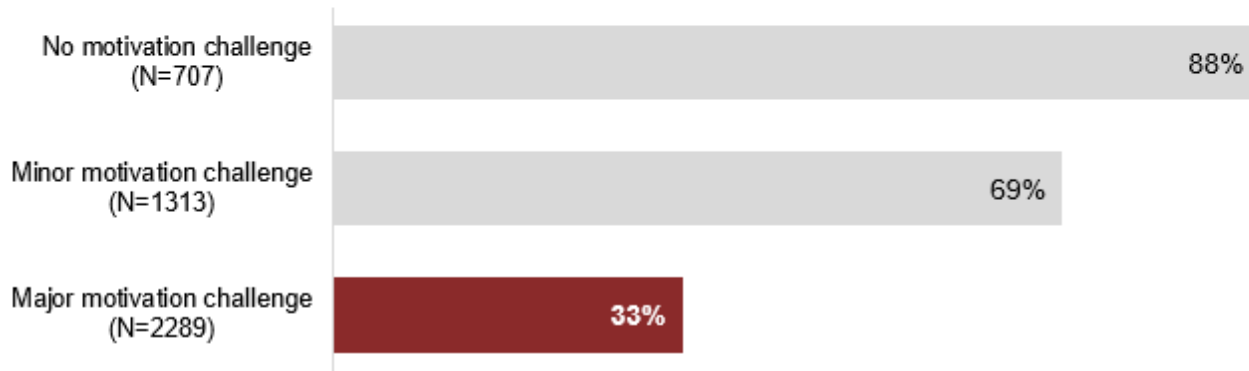
In sum, motivation is crucial for a positive RLEP. The more students struggle with motivation, the less likely they are to have a positive RLEP. Interventions seeking to foster student adaptation to remote learning need to also target student motivation, mindset, and attitude towards remote learning. An important question is: what interventions/practices are most likely to lead to increased motivation for remote learning?