

# Supporting students' transition to HE or alienating them: Pedagogies and Transitional Experiences in two educational contexts

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[399 words]

This paper draws on our projects on transition to mathematically demanding subjects ([www.transmaths.org](http://www.transmaths.org)) in UK HE and an extension of this work in Norway. We seek to answer the following: (a) How can we measure pedagogical and learning aspects of students' transition into HE, (b) how can we test the comparability of these measures across different educational contexts, and (c) to what extent are these measures associated with other mechanisms of supporting students with their subject choices?

Building on the theoretical framework of our previous work, directly relevant here is the measure of teacher self-reported pre-university pedagogy and its association with students' learning outcomes [1], and the measure of students' transitional experience into HE and their feelings during this transition [2]. Here we present two extensions of this measurement:

A. A 'conversion' of the pedagogy instrument [1] into two measures of students' perceived pedagogical experience before and during their first year at university in UK.

B. An extension of [2] and the outcome of A, into the Norwegian educational context.

Analysis is based on longitudinal surveys of students entering different programmes in five UK universities (N=1778) and ongoing longitudinal surveys in two Norwegian Universities (N=721). Validation performed within the Rasch measurement framework seeks validity evidence through item fit statistics (construct unidimensionality) and Differential Item Functioning. The latter provides evidence for cross-national measure invariance and presents a methodological challenge: its resolution will have implications for cross-national comparisons. Once invariance is established we proceed with substantive comparisons.

Some illustrative results point to a negative association of pre-university transmissionist pedagogy (UK) with a measure of students' "perception of effectiveness of first year maths support". This measure was also found to be positively associated with positivity in transition [2]. Comparative, preliminary results also showed that the Norwegian students reported more transmissionist teaching during their pre- university maths courses compared to students in UK ( $t=11.66, p<0.001$ ).

Extended results will show how these measures are associated with other indicators of students' support (or alienation when in opposite direction) in HE and other (attitudinal) outcome measures. Educational implications will be discussed in light of their significance to students' alienation and/or the potential remedies for facilitating their transition to HE.

[1] Pampaka, M., et al (2011). The association between mathematics pedagogy and learners' dispositions for university study. BERJ-DOI: 10.1080/01411926.2011.555518(iFirst).

[2] Pampaka, M., et al (2011). Measuring students' transition into university and its association with learning outcomes. BERJ-DOI: 10.1080/01411926.2011.613453(iFirst).