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Student learning in higher education : where we are and paths forward

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## **Student learning in Higher Education: Where we are and Paths forward**

### **Abstract**

This special issue originated from ongoing discussions on how research in the past decade has (not) informed current theories on student learning in higher education. The contributions to this special issue each present a discussion of conceptual and methodological directions with possible connections or suggested dead ends in the major research traditions of the field. The special issue closes with two commentaries in which senior researchers critically discuss the contribution of the special issue regarding the question of where we might theoretically go in the field of student learning in higher education research.

The idea for this special issue originated from a walk in Melbourne city where the guest editors both spent a sabbatical in the summer and autumn of 2015. Our discussion began from the observation that research investigating students' learning within higher education has led to contradictory results (see e.g. Baeten, Kyndt, Struyven, & Dochy, 2010; Dinsmore & Alexander, 2012) and the growing consensus in recent debates that an important source of these contradictory findings is related to problems at the conceptual and measurement level (see e.g. Dinsmore & Alexander, 2012; Richardson, 2013). Together we had been organizing several symposia, mainly during the conferences of the special interest group on Higher Education of the European Association for Research on Learning and Instruction on this issue. We agreed that more work was necessary if we were going to meaningfully push the field of student learning in higher education forward.

More than a decade ago Educational Psychology Review dedicated a special issue to “Measuring Studying and Learning in Higher Education—Conceptual and Methodological Issues” (edited by Olkinuora & Lonka) and this issue is still referred to in order to give a state of the art of the field in many presentations and papers. However, during the past decade, advanced research methods have been increasingly employed in the field. We argued during our walk in Melbourne that the time had come to focus again on our conceptions of teaching and learning within higher education and to critically discuss how research in the past decade has (not) informed our theories on student learning in higher education—many of which are now nearly or more than three decades old. Hence, the idea for this special issue was born. Our aim was to challenge authors in the field from different theoretical backgrounds and different parts of the world to write critical reviews with constant attention to making connections, noting dead ends and pointing to where (and how) the field of research on student learning in higher education might continue to advance. Therefore for each article, we asked authors to

undertake a systematic, critical review of the research regarding their major theoretical framework with the goal of making clear where changes are needed or where gaps need to be filled. We invited authors well in advance to contribute to the special issue and provided them with three clear guiding questions: (1) What is the current state of the art of their theory? (2) What conceptual and methodological direction would you suggest? (3) How does ‘your’ theory converge and diverge from other theories? We also invited two senior experts in the field to read and comment on the papers and share their critical thoughts in a discussion paper.

### **Historical and geo-specific considerations**

To meaningfully examine our theories of student learning during higher education, their historical and geo-specific development need to be understood. The theories that have come to dominate higher education emerged during the previous century and remain largely unchanged to this day. Many of these theories share early theoretical seeds (e.g., cognitive processing theories, Craik & Lockhart, 1972; meta-cognition, Flavel 1979). Since their inception, some of these theories have run parallel in their specific national contexts.

The theories included in this issue reflect the growing field’s engagement with the how and why of learning during higher education. Student approaches to learning (SAL) has a rich and longstanding tradition growing out of European and Australasian work from the 70s and 80s. Contemporary, and running parallel, self-regulation (SRL) grew to dominate North American conceptions of learning during university. During the 1990’s learning patterns, focusing chiefly on the Inventory of Learning Styles, expanded the European dialogue to include the regulation of students’ studies (among other concepts). A convergence of theories regarding the higher education experiences pushed Student Engagement to the forefront of North American conceptualisations of student learning at university.

This special issue is an attempt to bringing often overlapping but distinct theories together with the aim of making a step towards continued development rather than sustained segregation. In addition to the well established theories of student learning, by including student engagement in the current issue we hoped expand the borders of the discussion begun in the 2004 special issue. Student engagement has become the dominant focus for institutional evaluation of the student experience, and yet international student learning researchers have often ignored it. While its popularity in North America and then Australia could be overlooked, its absolute dominance in Mainland China cannot. Through this special issue, we therefore aimed to update, compare, contrast and (where possible) build bridges between these theories. This is done through rigorous review of the current literature (Asikainen & Gijbels, this issue; Dinsmore, this issue; Vermunt & Donche, this issue), building on previous models (Zusho, this issue) and repurposing longstanding models toward broader theoretical integration (Fryer, this issue).

### **Overview of contributions in the special issue**

The first contribution to the current special issue reviews the evidence supporting and contesting the contention that experience in higher education supports the development of deep approaches to learning. It is an issue that has been explicitly and implicitly part of the student approaches to learning literature for decades. Asikainen and Gijbels (this issue) examine the empirical and conceptual evidence up to, and including, the most recent longitudinal work in the field. They suggest that research to this point does not support the longstanding contention that higher education supports increased deep approaches. Reasons for these results, their implications and potential avenues going forward are discussed in detail.

Departing from his previous review (Dinsmore & Alexander, 2012), Dinsmore (this issue) begins the second contribution in the special issue by presenting a comprehensive outline of strategic processing. This summary is inclusive of the models preceding and following this paper, while successfully weaving in major US models. This review works to uncover our state of the art knowledge regarding strategic processing. This systematic review is guided by persistent, fundamental questions related to long pursued research programs in the area of strategic processing. Many such programmes have been built on dichotomous interpretations of processing, been limited in sensitivity to context and often failed to address individual differential processing strategy use. Focusing on the necessary and growing potential of measurement tools, this review presents important direction regarding the what, where and how of strategic processing.

Vermunt and Donche (this issue) build directly on Vermunt and Vermetten (2004) in the third paper of the special issue. They review the recent decade of literature, which has seen learning patterns research grow substantially. Their focus is on the core principles of learning patterns, the recent international research undertaken with the Inventory of Learning Styles and directions forward for this area of research. The authors present a mature and growing area of higher education international research. They then work to build on its success by pushing its conceptual, methodological, international and inter-disciplinary boundaries.

In the fourth contribution to the special issue, Zusho (this issue) constructed an integrative review of three fields of higher education research that are rarely brought together even in pairs. The author presents the unique elements and essential intersections of self-regulation, learning patterns and student engagement research. The purpose of this strategic review was to lay the groundwork for improved understanding across these conceptual boundaries. The author then proceeds to build on past SRL modeling in this area to present an

enhanced model of SRL with specific implications for teaching and learning in higher education.

Consistent with Zusho's integrative theme, Fryer (this issue) begins the fifth contribution of the special issue by addressing and then building from Pintrich's (2004) discussion of the divide between SRL and SAL models of learning during higher education. The author disagrees with the faculty development and grain-size related divisions raised, but concurs with the necessity of a top-down theory for substantive integration of significantly overlapping models. Building on previous systems theory based integrative efforts (3P; Biggs, 1993), Fryer reviews the potential of the psychological need for competence and its sub-theory of perceived control as a bridging theory to support integrative efforts. How such bridging might take place and its implications for future research are discussed in detail.

In line with the geo-specific considerations discussed above, in the two final contributions of the special issue, two well-known senior scholars in the field, one from each side of the Atlantic, present their considered opinions about the special issue papers. In their commentaries, Richardson (this issue) and Alexander (this issue), each in their own way, critically reflect upon the aims that the special issue put forward and to what extent the contributions in the special issue met these expectations: critical reviewing a field, making connections, noting dead-ends and pointing to where and how the research on student learning in higher education might continue to advance. Both Richardson (this issue) and Alexander (this issue), however, go well beyond commenting on the individual papers in the special issue. Both commentaries also provide the readers with their own view of the future of research into higher education teaching and learning.

### **Theoretical connections, directions and cul-de-sacs**

As suggested by the title of (this introduction to) the current special issue, we hoped to support a refocus of the field of student learning in higher education. We aimed to undertake this firstly by addressing unresolved issues in the field regarding the developmental nature of students' approaches to learning (Cul-de-sac and future directions; Asikainen & Gijbels, this issue). While pivotal in European and Pacific-Asian contexts, approaches to learning only tells part of the (processing strategy) story. For a complete picture, a more comprehensive review with due credit to North American research in this area is presented (Cul-de-sac and future directions; Dinsmore, this issue). The current special issue, in addition to attending longstanding questions regarding strategic processing specifically, also hoped to build on the successes of the previous issue more broadly. This is precisely what the learning patterns contribution aimed to do in a direct manner (extensions and future directions; Vermunt & Donche, this issue). The final two review articles both, but in very different ways, built on Pintrich's (2004) efforts at connecting American and European work in the area of motivated learning strategies. The first contribution with this aim sought to close that gap through a broader perspective, working to connect SRL, learning patterns and Engagement (Connections; Zusho, this issue). It ends by building on previous SRL models (theoretical directions). The final contribution attempted to address the issues Pintrich highlighted head-on. This was achieved by simply responding to Pintrich's suggested divisions and then presenting why and how theoretical bridges might be built to draw our models closer together (connections and theoretical directions; Fryer, this issue).

The general aim of the current special issue was to present reviews of state-of-the-art research on student learning in higher education and to move the field forward by focusing on theoretical connections, future directions and cul-de-sacs. In the two final papers of the special issue Richardson (this issue) and Alexander (this issue) shared their view on how far the papers in the special issue succeeded in meeting this aim. We invite the readers to make

their own assessment of this contribution toward a better understanding of where we are, are (not) going and how might get there together.

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