

LEARNING GAIN IN HIGHER EDUCATION

INTERNATIONAL PERSPECTIVES ON HIGHER EDUCATION RESEARCH

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LEARNING GAIN IN HIGHER EDUCATION

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EDITORIAL INTRODUCTION

Christina Hughes and Malcolm Tight

Learning Gain in Higher Education

Increasing attention has been paid, nationally and internationally, in recent decades to the issue of what higher education does for its students. What do students gain – in terms of learning (knowledge and skills) – from engaging in higher education for three, four or more years? And how might this learning gain best be measured?

Institutions of higher education, along with national governments and international organizations, are closely concerned with the answers to these questions. With mass participation in higher education, and students bearing an increasing proportion of the costs of their participation, it is seen by some as being critically important to be able to demonstrate – convincingly and transparently – how students have progressed.

This volume explores the latest thinking and research on this topic, and discusses varied practice, from across the globe. It tackles and offers answers to key questions about learning gain in higher education: what is it? – how does it relate to other key ideas and concerns? – how can it be studied and measured? – how is it conceived of in different parts of the world? – what is the evidence on the extent of learning gain in higher education?

Chapter Contents

The 10 chapters in the remainder of this book together offer a picture of the state of play of research and thinking on learning gain in higher education. Their perspectives range from the global to the national and institutional, and their foci cover methodology, measurement, employability, quality and sustainability.

Malcolm Tight discusses the results of a systematic review into existing research on learning gain in higher education. Building on another recent systematic review, he identified a total of 103 relevant published articles on the topic for analysis. He considers the origins and meaning of learning gain, and its relation to similar terms, the ways in which it has been applied in practice and research, and the issues and critiques that have been raised.

Jekaterina Rogaten and Bart Rienties provide a critical review of learning gains methods and approaches. They review some of the common definitions and the methods employed in research on learning gains, and will provide a critical

evaluation of the computational aspects of learning gains, the lessons learned and what is not yet known.

Olga Zlatkin-Troitschanskaia and Miriam Toepper outline the challenges that research and practice in higher education have faced in measuring students' competences and learning outcomes. They focus in particular on the German context and its national-wide programme on Modelling and Measuring Competences in Higher Education. The central results of the second phase of this programme are presented and discussed for the first time.

Katrina Crotts Roohr, Margarita Olivera-Aguilar, and Ou Lydia Liu approach the issue from the US context. They offer a brief history of the discussion of the value added by higher education in the US, summarise the initiatives that have been undertaken, and review how value added is measured. Problems of methodology and interpretation are examined, and the authors conclude by considering possible future directions.

From the UK perspective, **Christina Hughes and Heike Behle** provide an overview of the Legacy project and its evaluation, focusing on the effectiveness of the different methodologies used for measuring learning gain. The overall impact of the project on participating institutions and the higher education sector as a whole, in terms of capacity building and developing communities of understanding, is also reviewed.

In their chapter, **Shweta Mishra and Edith Braun** map the changes in the overall goals and objectives of higher education against various political and economic forces, and discuss the implications of these changes with reference to 'employability gain' of graduates. After discussing definitions of employability, they examine the potential of two assessment approaches – self-reports and performance-based tests – for measuring employability gains based on research findings from two higher education quality management projects implemented in Germany.

Camille Kandiko Howson examines the new approaches to quantifying learning gain and new metrics that were developed through 13 pilot projects across England. Evaluation of the projects explored the theoretical underpinnings of the metrics including behavioural, cognitive and affective approaches, as well as progress and outcome measures, and identified challenges to measuring learning gain. In this chapter policy implications of the global accountability agenda are discussed, including the use of metrics to drive enhancement, rank excellence and ensure quality and standards.

Kerry Shephard analyses the evidence for learning gains but suggests that we should also be open to the possibility of learning losses. He explores if teaching students the skills and dispositions to think critically, deeply and independently, better than we do at present, might not only be a better fit to the liberal traditions and abilities of higher education, but also best support generations to come to decide for themselves what their contribution to sustainability could be.

Darrell J. R. Evans argues that Australian universities have a rich history for enabling, promoting and evaluating innovation and excellence in learning and teaching. However, the recent removal of specific government funding to support innovation, the increased emphasis on student success and employability

outcomes, and the threat of performance-based funding means that Australian universities will need to commit to the ongoing development of learning and teaching and demonstrate the potential for learning gain.

Finally, **Robin Goldberg and Vicki Chandler** detail the experience of Minerva in the US. At Minerva, they had the luxury of starting a new college from scratch. They discuss how the college was designed to deliver specific student outcomes, with all of the operating practices and systems needed to support faculty and students in this pursuit. They share how Minerva defined what they teach, how they teach, and how its practices enable them to measure whether their students are indeed achieving the outcomes intended for them.