

A Critical Introduction  
to Learning and  
Teaching in Higher  
Education



# A Critical Introduction to Learning and Teaching in Higher Education

By

Phil Robinson-Self

**Cambridge  
Scholars  
Publishing**



A Critical Introduction to Learning and Teaching in Higher Education

By Phil Robinson-Self

This book first published 2023

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Copyright © 2023 by Phil Robinson-Self

All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

ISBN (10): 1-5275-3214-3

ISBN (13): 978-1-5275-3214-4

# CONTENTS

Preface .....	vii
Introduction .....	1
<b><i>Section 1 Learning</i></b>	
Chapter 1 .....	14
Theories of Learning	
Chapter 2 .....	29
Environments, Communities, and Partners	
<b><i>Section 2 Teaching</i></b>	
Chapter 3 .....	46
Effective Teaching	
Chapter 4 .....	68
Technology and Teaching	
<b><i>Section 3 Assessment</i></b>	
Chapter 5 .....	84
Approaches to Assessment	
Chapter 6 .....	101
Feedback Practices	
<b><i>Section 4 Curriculum</i></b>	
Chapter 7 .....	118
Curriculum Theory and Design	
Chapter 8 .....	131
Teaching Evaluation and Leadership	

Works Cited..... 142

Index..... 173

## PREFACE

This volume offers a concise, critically minded and practically focused introduction to learning and teaching in higher education. It covers key issues such as how students learn, teaching practice and the vexed subject of excellence, contemporary approaches in assessment and feedback, the impacts of technologies, and curriculum design and leadership. It offers an honest, accessible introduction to the subject with a critical eye on the pressures faced by teachers and students in higher education today.

The intention here is to provide a genuine entry-level introduction but one which adopts a critically aware view of the purpose and practice of teaching and learning in higher education. The book is designed to cover a good amount of ground, touching on a number of subjects; in so doing, of course, it necessarily sacrifices some depth. Interested readers of particular areas will naturally want to pursue further reading. The volume proceeds from a position of critical pedagogy, which sets it somewhat apart from other introductions to teaching in higher education. Other critical introductions to teaching and learning certainly exist but are mainly located at school level (e.g. Mufti and Peace 2012; Brown and Wisby 2020; Nelson et al. 2021). Critical examinations of higher education at sector level are plentiful (e.g. Collini 2012; Barnett 2022), but tend to be more abstracted and philosophical in nature, rather than dealing with practical matters of teaching and learning.

Much of the literature on teaching and learning is also aimed squarely at particular markets, with much written on either the UK or US higher education sectors; this volume aims to avoid such specificities in favour of discussing more general issues and concerns, though in so doing we should not confuse the general with the universal. There is an additional perspective here, too, in that this volume has been conceived and written post-pandemic and hence takes into account the impacts on teaching and learning of the Covid-19 pandemic itself (e.g. in terms of student and teacher well-being) and the subsequent increase, for good and ill, of digital technologies in higher education.

Following the general introduction, the book breaks down into four broad sections: teaching, learning, assessment, and the curriculum, with two

chapters in each section. In the first chapter following the introduction, we consider the theoretical background that has influenced understandings of student learning, before moving, in the second chapter, to a broader consideration of the environments and communities in which learning occurs. In the third chapter we move to the subject of teaching through discussion of effective delivery and facilitation, still the main methods through which teaching is constructed and thought about. In the fourth chapter we focus on the impacts of technology in teaching, in terms both of digital technologies and approaches to online and blended learning. In the fifth and sixth chapters we look, respectively, at assessment approaches and feedback strategies. Finally, in the last two chapters the volume considers the curriculum: firstly, in terms of theory and design and, secondly, in terms of teaching leadership and evaluation.

While the book may thus be read consecutively from chapter to chapter, it is also entirely possible (and, one assumes, more likely) for the reader simply to dip into particular material at relevant times. With that in mind, the chapters aim to be understood individually and are structured to be readily digestible: each chapter is further broken down into shorter sections to help guide the reader to the most useful material for them.



# INTRODUCTION

## **Higher education today**

It is now something of a truism (but nonetheless true) to note that the higher education sector globally has changed, enlarged and diversified over the past few decades. Much of this is positive: a greater number and variety of students access higher education, and have greater choice about how to access that education, than ever before. It is also fair to say, however, that teaching has grown ever more complicated over the years. An increasingly diverse range of institutions with degree awarding powers has led to a similarly diverse range of goals for learning, and consequently a variety of notions of what constitutes, or what ought to constitute, good teaching practice (Nixon et al. 2001; Fitzmaurice 2008; McCowan 2019). Some institutions place greater strategic emphasis than others on research capacity; some on the skills and employability of graduates; some on links with industry; some on attracting international students or on offering placements abroad; and some on particular cultural or pedagogical values. The balance of these kinds of priorities will affect how curricula can be shaped within each institution. The organization of teaching and of education strategy will likely look different in larger institutions with broader subject coverage than in smaller and more specialist providers; different again in institutions rooted in particular regional communities to those spread widely across multiple campuses; different again in those with greater investment in online provision, different again where higher education courses are only one element of the provision an institution offers, and so on.

Thus, which goals are to be pursued in teaching and learning, which innovations implemented, which stakeholders consulted, which staff involved in the delivery of teaching, its leadership and at what level of seniority are all variable by, and often also within, institution. Equally, particular goals in the delivery of curricula may jar or find resonance with senior managers, academic staff, students, and other constituents within academia. The role of meeting and matching such issues and competing demands with appropriate teaching is no simple business. Such complexities have been exposed and further exacerbated by the global Covid-19 pandemic and the subsequent lockdowns in various countries, the move to

online education, and the health and social impacts on staff and students alike (Cunha et al. 2020).

Meanwhile, the position and status of teaching within an academic role has changed over the years, just as the institutions in which those roles are located have also changed. In the spheres both of teaching and research, there has been an increasing degree of governmental influence, interference and regulation. This has gone hand-in-hand with the marketization of the HE sector across many countries, increased competition and accountability, and a consequent move towards private-enterprise style management marked by key performance indicators, objectives, metrics, work-allocation-modelling, performance management, an increase of executive over academic power, and a closer alignment to the perceived political priorities of the day. We have also seen a diversification of academic activity, which now often includes knowledge exchange and transfer, consultancy, entrepreneurship, spin-off business creation and other professional engagements alongside or as a replacement for traditional teaching and research.

Against this background, we can observe significant changes in the profile of academic employment and the place of teaching within it. More than one commentator on higher education has noted the “unbundling” of the academic profession, with an increasing number of individuals appointed to specialist contracts rather than to the more traditional, and more amorphous, academic contract covering teaching, research and administration (Kinser 2002, Macfarlane 2011, Blair 2018). The expansion of contract types has been reflected in the evolution of new career pathways for both teaching-specific and research-specific staff. In most cases a hierarchy develops between these two pathways, often to the detriment of those staff wishing to make a career in teaching; such structures also risk trapping staff into a particular type of role with less opportunity for progression. Meanwhile, an increasing number of specialists and institutional experts from outside traditional academic roles have become involved in teaching: academic and educational developers, teaching and learning advisers, curriculum specialists, student skills advisers, academic librarians, learning technologists, and so forth. For good or ill, teaching is no longer the business only of a particular academic or group of academics within a subject area. The action of teaching itself has become increasingly professionalized, with accredited teaching development courses available in many countries (and in some higher education systems more or less mandated).

Universities have increasingly moved to organizational structures which tend towards the hierarchical, managerial, and positional, with institutional leadership located in individuals rather than committees. Teaching, like other facets of universities, is now most often organized and led by particular individuals; usually this comes with an attendant reduction in agency for those actually doing the work. This can be seen as part of a broader structural and cultural shift in the organization and running of universities beginning in the 1980s, a shift which has involved a movement from integrated academic cultures of administration to executive management, from relatively flat organizational structures to increasingly hierarchical ones (Middlehurst 2004). At the same time, the reorientation of universities in terms of market logic has tended to privilege (even if it has also constrained) scientific, medical, and business-related subjects which can show immediate benefits of investment to regional and national economies (Berman 2012). By comparison, the humanities and social sciences are often seen to lag behind in the context of “increasing pressures on institutions to orient [...] towards immediate societal needs, most commonly the economic ones, manifesting themselves at the micro-level in the employability of graduates and at the macro-level in links to the knowledge economy” (McCowan 2018, 279). While public sector universities have become increasingly centred on serving economic and societal interests, similar drivers have also created an attendant rise in private sector, for-profit higher education businesses with eyes fixed firmly on the bottom line.

There are well-rehearsed reasons behind these various changes. External drivers commonly pointed to include the marketization and massification of the sector, internationalization, knowledge commodification, public scrutiny, and the onset of austerity. Increased regulation, oversight, competition, rising living costs and student fees (in some regions), questions of consumer satisfaction, data protection, even something as prosaic as the sheer size of institutions, have all encouraged movements towards more hierarchical forms of institutional organization. From this viewpoint, students, academic staff, and other constituents of the university are increasingly seen in terms of human capital: the habits, knowledge, social, and creative attributes embodied in the ability to perform labour in the service of economic value. A range of matching cultural and organizational changes can be marked within institutions, including increased control (managerialism), increased competition between institutions (marketization), increased stress on transparency and measurement (bureaucratization), and the remodelling of structures and operations (corporatization). In much of the literature, this is regarded as invariably detrimental to higher education and to individuals working within it. There is some truth to this, and we may particularly feel

it in times of crisis. But it is also worth acknowledging that this type of narrative often assumes an idyllic past to higher education borne more out of nostalgia than the reality of the history of universities; a history, which, at least as it pertains to the Western tradition of higher education, has been frequently elitist, marginalizing and colonial in nature.

The ensuing consequences of changes in the sector have been widely reported and debated, as have the effects on the organization of teaching and of curricula (Barnett and Napoli 2009; Bolman and Gallos 2011; Buller 2014). Such developments have been encouraged, and critiqued, globally; these can be seen as part of broader neoliberal movements in which higher education policy is increasingly based on “assumptions of globalisation, competition and meritocracy” (Kenny and Fluck 2018, 25). In this model, education is viewed as being clearly “tailored to the needs of corporate interests” with increasingly less impetus to face “pressing social and ethical issues” (Giroux 2002, 106–7). Similarly, Bulaitis describes the “adoption of economic value as the driving rationality of governance” for universities, with “the rhetoric of economic justification [...] a formal requirement for government subsidy of creative and cultural ventures” (Bulaitis 2020, 202–3). At the least, it is clear that higher education teaching and learning is under the spotlight in ways not seen in previous decades, subject to various measures of oversight, regulation and to periodic reviews of its quality.

How the university is conceived and particularly what purposes it is assumed to fulfil affects what types of knowledge are valued, incentivized and rewarded, what shape our programmes of study take, and the interactions and expectations of our students. The question of what universities are for is not a new one, though it has resonated of late and been given full voice by critics such as Stefan Collini (2012) and Ronald Barnett (2022), among others. The shift towards the marketization and privatization of higher education as a means to achieve its goals has spurred dialogue among legislators, policymakers, and academics on whether higher education is chiefly a public or a private good (Lambert 2014). Although it is often used axiomatically as a convenient explanation of the purpose of the university and of higher education more generally, it should be noted that the concept of a public good itself is by no means simple or unproblematic. There is a large body of literature in economics and politics, for example, concerning the nature of public goods and their relationship to private contribution; even at a quite basic level we might ask questions such as which public, and whose good? Ideal public goods are generally defined as non-excludable and non-rivalrous, meaning that no one is effectively excluded from using a public good and that the consumption of that good

by one person does not reduce its availability for consumption by others: whether either of these things are or have ever been true of the university is highly debatable. Moreover, we might be minded to question the assumption that a private-public goods dichotomy is adequate for understanding the complex processes present in higher education.

Be that as it may, most institutions will tend to frame themselves and their “missions” in similarly styled grandiose language which reflect on the public benefits of universities. Global significance; world-leading and world-changing excellence; innovation for both intellectual and economic benefit; partnership and impact beyond academia: what comes through clearly in this sort of language is the idea of higher education as being externally facing, relevant, impactful, economically generative, influential. There are many positives to this view of the university; and, indeed, the work that universities performed for society in relation to the Covid-19 pandemic, for example, has been rightly lauded. But it is also the case that there is a particular view of the purpose of education at play in such language. Older notions of disciplinarity, curiosity and discovery, integrity, ethics, and so on, tend still to be present in university missions also, but to what extent these ideas are in harmony or in tension with social and economic impact will no doubt be in the eye of the beholder.

Higher education has an important role to play in societal development, business and industrial innovation, and a large body of research has investigated the mechanisms by which this occurs, for example in terms of the transfer of human capital and of intellectual property. Researchers have also analysed the impact of industry involvement and exchange on universities, both in general terms and in the changes such involvement has brought to concepts of academic identity, particularly the development of academic entrepreneurship. While some emphasize the benefits (both financial and academic) of industry and enterprise for universities, others fear that growing involvement in this arena might have detrimental effects on research, teaching, and the curriculum: what knowledges are valued and transmitted. These are questions that affect all of us and are key to how we conceive and construct teaching and learning.

## **Critical background**

In the following chapters, this volume will set out practical and theoretical considerations in relation to a variety of areas of higher education. It is divided into four sections which are broadly concerned with learning, teaching, assessment, and the curriculum. The intention is to provide

concise, clear and helpful thought in relation to these areas. But it is also worth stating that, firstly, these areas and indeed higher education as a whole are the subject of much contestation and, secondly, that this volume does not itself take a neutral stance in this regard. Although the slant of the discussion through the book is intended to be practical, it is nonetheless the case that the volume is informed by critical pedagogy and should be read in that light. Indeed, arguably any discussion of teaching and learning should be seen in terms of the contexts in which these activities occur: the dynamic and diverse institution that is the modern day university along with the political, social and cultural forces which shape the perceived purposes and the delivery of education.

The present section, then, will set out the background which informs this volume through a brief exploration of critical pedagogy: essentially, a field of oppositional pedagogies which work to create educational experiences that are transformative, empowering, and transgressive for both individuals and the fabric of society at large (Kincheloe 2005; McLaren 2009; Giroux 2011). While the previous section of this chapter noted the changing position and purpose of universities, critical pedagogy asks us to focus on the purpose of education more broadly. What, after all, is education for? Traditional education systems, critical pedagogy argues, are a machine designed to contain and constrain: to indoctrinate into a given world view and into a fixed position in society. By this measure, modern higher education has been appropriated to serve neoliberal, national (and nationalist) government agendas, to export those agendas to other nations, to produce a future workforce for the betterment and growth of the economy, to funnel individuals through to jobs and itself to operate as a competitive market commodifying learning. We may recognise elements of this. But we may also feel that we fulfil a vital role in nurturing and providing our students with the critical skills and capacity to challenge, to contest, to effect change, and where necessary to hold those in power to account. Either way, critical pedagogy offers one powerful route into discussing and deconstructing what we do as academics, as teachers.

Critical pedagogy is perhaps best viewed as a contested, dynamic educational field, even if it is also now a very well established one with a reasonably long history. Broadly speaking, it seeks to uncover, problematize and, to various extents, actively change the relationship between education and politics, between sociopolitical relations and pedagogical practices, between what occurs in the classroom and the reproduction of dependent hierarchies of power and privilege in society. It emerged from various intellectual, theoretical and political forces during the twentieth century,

from Frantz Fanon to Antonio Gramsci (and with occasional glances back to John Dewey), but is influenced greatly by the work of Paulo Freire (e.g. Freire 1970; 1975, 1994). In *Pedagogy of the Oppressed*, Freire argued that existing models of teaching involve teachers depositing knowledge into students who passively receive the information but who have no control over the process or the nature of the information received. The educational system provides the framework for these transactions, containing both teachers and students within it and imposing its own rules. The system runs in such a way that wealthier students receive better deposits than poorer students and, on the basis of the paper qualification produced at the end, the wealthier students have a better quality of life than the poorer: a cycle which continues by generation and perpetuates the preserve of social privilege for the few. This system is described as the “banking model” of education (a metaphor which is perhaps easier to appreciate in relation to the movement of paper in pre-digital banking).

Freire argued for a more equal relationship between teacher and students in which learning is negotiated between them rather than pre-decided or imposed by the system. Instead of transmission, he proposed a problem-posing education in which the questions posed allow the students to develop critical consciousness, allow the oppressed to recognize and to overcome their social condition. Such a pedagogy rejects capitalist systems of education, replacing it with a pedagogy of liberation built from the ground up by the oppressed: “no pedagogy which is truly liberating can remain distant from the oppressed by treating them as unfortunates and by presenting for their emulation models from among the oppressors. The oppressed must be their own example in the struggle for their redemption” (Freire 1970, 47). Equally, the oppressors in the system should be willing to constantly examine and re-examine themselves and their role.

Although Freire’s work is arguably in the main concerned with social class, there is also a clear racial element to this struggle in as much as the existing pedagogical practices which Freire takes issue with were (and remain) at root a colonial imposition. Enrique Dussel refers to such practices as “educational praxes of domination” which attempt to assimilate the Global South through a schooling in the dominant Westernized culture and its consumerist ideology. “The major result of such praxes”, Alcoff comments, “is to impart a sense of failure among the poor, who of course constitute the majority of children [...] after inducing failure in these students, these ‘educational praxes of domination’ then inculcate feelings of guilt and shame for having failed to successfully assimilate the dominant cultures of their exploiters” (Alcoff 2016, 19). As Henry Giroux puts it, “critical

pedagogy attempts to understand how power works through the production, distribution, and consumption of knowledge within particular institutional contexts and seeks to constitute students as informed subjects and social agents” (Giroux 2010, 717). For Giroux and others, pedagogies of repression include many elements of modern education with which we may be familiar: the reduction of education to testing, to learning objectives, to consumption, to things that can be quality controlled.

Critical pedagogy thus seeks to expose and undo hegemonic values and systems that privilege the oppressor and perpetuate domination and social injustice (Darder, Baltodano, and Torres 2003). A central aim of critical pedagogy, then, is to engage teachers and students together in a critical examination of how power relations operate in education and to expose how these relations sustain and propagate existing hegemonic social structures, particularly connected to the construction of knowledge (a process Freire refers to as *conscientização*, or conscientization; the gaining of critical consciousness). Its key tool is to equip teachers and students with the language of critique and the rhetoric of empowerment to become “transformative agents who recognize, challenge, and transform injustice and inequitable social structures” (Zembylas 2013, 177–178).

The debates that have taken place around and within the field of critical pedagogy over the last decades point to its continued usefulness and relevance, even as they also testify to “the instability of the term as a signifier, a discursive formation, and a practice” (Porfilio and Ford 2015, xv). What constitutes criticality is, after all, not set in stone but, somewhat by nature, open to contestation and debate. All the same, we can note various themes and theoretical tendencies within critical pedagogy as it has unfolded over the last four decades. From one direction, critical pedagogy has roots in the critical theory of the Frankfurt School (along with perhaps more directly political work such as Gramsci on cultural hegemony), with an attendant emphasis on the centrality of class and economics. This emphasis can be seen in critical pedagogy through the late 1960s and seventies in the work of Paulo Freire and, later, Henry Giroux and Ira Shor. This work is particularly concerned with the deterministic role played by elements such as culture, knowledge, and language in the maintenance and reproduction of oppression, inequality, and injustice (i.e., capitalist social relations), and the intimate connection of these processes with education.

In the eighties, we can see this work rightly complicated by waves of post-structural, postmodern and feminist responses; Elizabeth Ellsworth’s 1989 article “Why Doesn’t this Feel Empowering? Working through the



Repressive Myths of Critical Pedagogy” remains one of the more powerful critiques of the gaps and missing voices in critical pedagogy. Into the nineties, the picture was complicated again by work emerging from and responding to queer theory and critical race theory. All of which tend to complicate critical pedagogy with concepts of intersectionality in identity, the premise that social categorizations are not simply multiple but complicatedly interconnected as they apply to an individual or to a group. While the concerns of economics and class are still present, then, they must be seen alongside other elements, systems and histories of discrimination, disadvantage, disempowerment, and violence.

If the critiques and responses delivered in these various interventions have problematized underlying assumptions about the operations of power and oppression, ultimately leading to the inclusion of various forms of identity and difference, we can see in the first decades of the twenty-first century something of a return to questions of class and capitalism. Perhaps not unsurprisingly, this can be connected to the economic crisis of 2007 onwards: as Terry Eagleton noted in his 2011 volume *Why Marx was Right*, it is easier to see a system precisely as a system when it starts to break down (2011, xi). What we can also see is more of an emphasis on praxis as opposed to theory, a “revolutionary critical pedagogy” emerging in response to what key figures such as Peter McLaren or Curry Malott see as the domestication of critical pedagogy under neoliberalism, its reduction to an educational method. We can thus see critical pedagogy and its concerns playing out in relation to activism, protest and progressive global movements such as Occupy, Rhodes Must Fall, or BLM.

As far as it relates directly to higher education, and specifically in terms of its use within higher education systems in the Global North, critical pedagogy has arguably become removed from its roots in both theory and active political protest and become more related to critiques from within higher education institutions. Such critiques are generally authored by academics working in the institution, and are often directed squarely at the institution. The objectivity of such critiques may thus be open to question, even as the issues raised (managerialism, neoliberalism, marketization etc.) may very well resonate with us. Indeed, some have argued that its very success within higher education has rendered critical pedagogy toothless: “domesticated, appeased, or even castrated by the present order of things” (Gur-Ze’ev 2005). Even so, there remain difficult questions here, which, assuming we accept the principle that they ought to be asked, require us to think in quite a deep way about the very purpose of our teaching.

In the final analysis, does higher education act “to empower the student”, or does it operate as “social control [...] as a moral gatekeeper of the state?” (McLaren 2009, 71). On the one hand, education can be seen as part of what Louis Althusser (1970) termed the ideological state apparatus: a form of control which traps both students and academics into serving and reproducing the interests of the state while at the same time preventing them from acting against it. On the other hand, education can be seen as an agent of empowerment, of liberation, a condition of critical praxis, “opening students up to ideas and perspectives that had previously never occurred to them, and developing in them the requisite confidence in their own abilities and opinions that allows them to act on and in the world” (Brookfield 2015, xii). Of course, this is not an either-or situation: universities are large and complex enough that they can serve more than one interest at once. We can be handed the task (pleasant or otherwise) to “educate the citizens of the nation-state” while also working “to encourage the critical thinking that would correct abuses of power” (Scott 2019, 96). These tensions are at the root of many of the subjects covered in the present volume, and are worth keeping in mind while working through those subjects.

## Structure of the volume

As previously noted, this volume breaks down into four sections: learning, teaching, assessment, and, joining these together, the concept of the curriculum. These sections could, in a sense, have been placed in any order. Beginning with student learning certainly echoes the emphasis in the sector at present on the student, both in (generally welcome) terms of student-centredness and (much less welcome) terms of customer relations. But in reality all elements of higher education are interrelated; one could start anywhere. So far as is possible, then, the book has been written to allow the reader to begin where they like, and to dip in and out as they see fit. Sub-headings throughout the chapters draw attention to the main points and central concerns.

In terms of coverage, the first chapter deals with two fairly traditional approaches to the concept of student learning. First is the historical take on learning theories: here we chart a chronological sweep from behaviourism, through cognitivism, to constructivism. This is viewed in terms of a movement from teacher-centred to student-centred learning, taking into account the related areas of social, situated and discovery learning which together have moved the focus in education from the teacher to the learner. Secondly, this chapter deals with the subject of “approaches to learning”,

along with the vexed subjects of learning styles and learning hierarchies. This more traditional view of student learning is complimented in the second chapter by a focus on learning environments and communities. Here, we consider the integration of student learning across the different environments in which that learning takes place. We then move to concepts of authentic and active learning, student identity and interaction, and the related ideas of learning communities and student partnerships. We conclude the chapter with discussion of inclusivity and decolonization, along with consideration of the tensions between these two movements.

In the second section of the volume, we consider the difficult and exhilarating business that is teaching. The first chapter in this section, chapter three, deals with elements of effective teaching: we start with conceptions informing teaching which broadly relate to the movements in conceptions of learning covered in chapter one. We then move to more practical considerations: the delivery of content, structuring teaching, classroom management, effective questioning and the like. In the subsequent chapter of this section, chapter four, we consider teaching and technology. Here the focus is not on particular tools or affordances, which in any case become very quickly superseded and out of date, but rather on the approaches we might take in introducing technologies and structuring their use within our teaching and within students' learning. This chapter also covers interactions between in-person, blended and online learning: we look among other things at synchronous and asynchronous interactions, online identities, and issues of engagement: probably the key factor in the success of online (arguably, any) learning.

The third part of the book covers assessment and feedback, devoting a chapter to each but again with the acknowledgement that these are interrelated subjects. Approaches to assessment, chapter five, begins by setting out the purposes of assessment and general types and modes. It then introduces the myriad principles, challenges and pressures which we have to balance up in designing assessment objects that work for students and for us. Chapter six then moves to consider feedback, beginning again with definitions and concepts before then looking at various different but linked aspects of feedback theory and practice.

The fourth and final section of the book looks at the curriculum, firstly in the sense of curriculum theory and design and subsequently in the sense of curriculum leadership and evaluation. Thus, chapter seven first sets out a short history of outcomes-based education as context for how we have arrived at the particular structures of curricula in most higher education

institutions. The chapter then presents various conceptions of the curriculum and of disciplinarity. The final chapter of the book provides some thoughts on the evaluation of teaching and the curriculum along with various models for teaching leadership.

**SECTION 1:**  
**LEARNING**

# CHAPTER 1

## THEORIES OF LEARNING

The concept of student learning is core to all aspects of higher education learning and teaching practice. What we mean and understand by student learning affects everything else that we do; of course, there are ways in which that understanding is necessarily only partial, just as the actions that we take in pursuit of that learning are also necessarily partial. For one thing, students are all individuals with their own individual needs; for another, there are practical, logistical and financial reasons why we might not always be able to provide an entirely optimal environment for learning. The aim of this first section of the book as a whole, then, is to explore various concepts of learning that have developed over the years, and to enable reflection upon what constitutes student learning in the context of various learning environments. In this first chapter we thus consider the development and impacts of theories around student learning, before moving in the following second chapter to consideration of interrelated components of the learning environment.

### **Learning theories**

There have been many attempts over the years to describe what learning actually is; after all, one cannot really describe the quality of learning, or indeed whether it is even happening, without a common definition of the subject in question. For that matter, we probably all have our own ideas of when learning happens, and what it looks like when it does happen. The words “looks like” in the previous sentence are important, however, because (arguably barring some research in neuroscience) we cannot actually empirically observe learning occur in others or in ourselves. Rather, we observe changes in behaviours, activities, demonstrations, and representations which *signify* that someone has learned, but this is not quite the same thing as the learning itself (Pattison 2016, 33–34). It is also the case that the significances we attach are culturally determined and dependent: at one time a given society may ascribe learning to be observable growth in one or another area of knowledge; at another time we may decide that knowledge is less important than skills; we may privilege learning that is socially

situated or we may see learning as something that happens by oneself in solitude, and so on. But in fact these are all just attempts at assigning different sorts of tangibility to something that is essentially abstract.

In the present and subsequent chapters, we will consider a variety of ways in which learning can be conceived. As a way of opening that consideration, it is worth beginning with several general theoretical threads that have attempted to describe how learning happens. Over the coming pages we will consider key theories which broadly fall within the labels of behaviourism, cognitivism, and constructivism. This is admittedly quite a number of “isms”; it is also a story that moves over a good century or more and hence is again necessarily partial, but it is worth covering this ground because much of the theory here still forms the foundation (sometimes explicitly, sometimes implicitly) for much more recent research, practice and policy relating to student learning.

It is also worth bearing in mind that much of the theoretical and empirical research on learning has been particularly concerned with the development of learning in children. From the end of the twentieth century this picture has changed somewhat, but it remains the case that much of the foundational work on learning has been extrapolated into areas with which it was not originally concerned. Indeed, some have argued that we should consider the particular learning of adults, a field which came to be known in the US and UK as andragogy (the term has a related but different meaning in mainland Europe). Originally developed in the work of Eugen Rosenstock-Huessy, the term was later popularized by Malcolm Knowles, who viewed teaching adults as a quite different beast from the teaching of children. Knowles’ arguments essentially viewed adults as being more experienced, more willing to learn than children, and with a more practical orientation in terms of their reasons for study. He also saw them as intrinsically rather than extrinsically motivated: i.e., that adults generally enjoy learning for the sake of learning.

Some of these conclusions are at best tenuous and might not necessarily line up with our own experiences in teaching either children or adults. However, the principles of andragogy are worth pausing over as, again, much of this is pertinent to the way higher education has come to be organized in many countries. Knowles argued for a particular sort of education that would suit his view of adults as being self-directed, experienced, and motivated. This adult education would involve extensive student input into the content of their studies and how they would be taught; it would allow the students’ existing practical experience to be brought into and reflected in their

learning; and it would be focused on application in the real world following the course of learning, on skills rather than the pursuit of more abstracted knowledge. The theory has received some critique, and Knowles himself evolved from an initial binary position to instead come to see learning as a spectrum from teacher-directed to student-directed, with individual learners each benefitting from activity at different points of that spectrum. What is interesting here, though, is that much of the direction of this work is picked up in current concerns around student-centred, graduate-focused and authentic learning, and an emphasis on doing rather than knowing; all of which we shall see more of later in the present and subsequent chapters.

## **Behaviourism**

The discipline of behavioural psychology originated at the beginning of the twentieth century, partly in reaction to previous studies in the field of depth psychology that had sought to investigate consciousness and the actions of the unconscious. The results of such approaches were argued to be subjective, unquantifiable and unverifiable, and therefore of only limited value in progressing scientific understanding. Two strands of inquiry had been working on the problem in different ways: from the mid-nineteenth century, early experimental psychology such as that deployed by Hermann Ebbinghaus or Gustav Fechner attempted to produce objective measures of processes such as learning and memory. At the same time, comparative psychology borrowed from Darwin to draw links between the traits and behaviours of humans and those of other animals (Baum 2017, 6–7). Both strands were seeking ways of solidifying psychology as a proper branch of natural science, and both were faced with clear difficulties in as much as science was at the time insufficiently advanced to observe the mind in operation.

The impetus behind early behaviourism, pioneered by the work of the American psychologist John B. Watson, was essentially to sidestep the issue, positioning psychology as the science of behaviour rather than of the mind, and basing research not on the workings of the mind but rather on the observable results of that mind at work. The methodological behaviourism of Watson, therefore, concerned itself with observable actions: what goes in (the stimulus) and what comes out as a result (the response). By implication, behavioural studies aim to measure how observed behaviour (response) changes as a consequence of interaction with the external environment (stimuli). Indeed, Watson's version of behaviourism has since been referred to simply, if reductively, as classical S-R theory (Moore 2017). In this



respect, it rests to a certain extent on the earlier work of Edward Thorndike and, perhaps most famously, Ivan Pavlov.

However, Watson, on the whole, was most concerned with mechanical causality: to put that another way, he was interested in why things behaved the way they did. By comparison, others were more interested in changing the stimulus in order to prompt and observe changes in behaviour. At the turn of the twentieth century, Thorndike had observed that behaviour which results in satisfying outcomes is likely to be repeated, whilst behaviour resulting in discomfort is likely to be avoided. This concept of the law of effect was instrumental in the radical behaviourism of Burrhus Skinner, who argued that desirable behaviour could be encouraged, and undesirable behaviour discouraged, though the application of reinforcement and punishment. This might be achieved through positive reinforcement (where behaviour is encouraged by the giving of a reward), negative reinforcement (where behaviour is encouraged by the avoidance or removal of an aversive, unpleasant stimulus), positive punishment (where behaviour is discouraged by applying a sanction), and negative punishment (where behaviour is discouraged by removing a reward). Through continued use, these processes bore out what Skinner termed operant conditioning: the theory that behaviour is moderated by its presumed consequences.

The various areas of behaviourism have fallen in and out of fashion over the years, but they remain influential in education. Learning has often been viewed in terms of observable changes in behaviour. From this point of view, good learning occurs as a result of good teaching: the desired behaviour change or response on the part of the student comes through the appropriate application or manipulation by the teacher of the relevant stimuli. And while terms such as conditioning may not be used, the basic concepts of reinforcement and punishment are nonetheless commonplace in education at all levels, both informally through praise, correction and criticism and more formally through the award of marks and the delivery of assessment feedback. The focus of behaviourism on what is observable and measurable, alongside the belief that changes in behaviour are the result of the external environment and environmental conditions, has also had a continuing impact, in as much as it means that we can both specify what learning we are looking for and what good learning looks like. In terms of the reality of educational practice, this underpinning idea is no more apparent than in the dependency of much (and certainly Western) education on the articulation of measurable learning outcomes and the development of criterion-referenced assessment criteria. We shall see more of this in later chapters.

Although behavioural approaches are commonplace within educational settings, their application is, as we shall see, more likely today to be associated with learning characterized as being of “lower order”, for example the acquisition of factual information or replication of a specific set of procedures, rather than “higher order” learning involving problem solving or the development of critical thought. That said, the idea of lower and higher order learning is itself deeply problematic: a subject we shall return to later in this chapter.

## **Cognitivism**

The development of the discipline of cognitive science, sometimes labelled the cognitive revolution, began in the 1950s with interdisciplinary study of the activity and processes of the mind. Informed by work across psychology, linguistics, anthropology, philosophy, and computer science, cognitivism gradually grew more influential as a paradigm for understanding the way the mind works (Miller 2003). By the 1980s, cognitivism was the dominant line of research inquiry in psychological fields while also heavily influencing work both in neuroscience and in artificial intelligence.

Cognitivism seeks to understand the processes by which the mind interacts with the outside world, applying scientific method to the study of cognition: how the mind receives, sorts, organizes, and stores information, and how information is then retrieved and applied. This is, fundamentally, the study of perception, senses, memory and recall. Where behaviourism concerns itself with responses resulting from particular stimuli, cognitivism is more interested in how and why a particular stimuli results in a particular response. This is the sort of fine distinction that makes a large difference: here, learning is not so much to do with behavioural changes but rather the processes producing those changes. From an educational standpoint, there are important consequences to this movement in focus, not least that the individual person now becomes an active rather than a passive participant in the learning process. It also means that if we are to facilitate effective learning we, as teachers, need to understand the way the mind processes information and how memory works. This does not mean we all have to become experts in cognitive psychology or neuroscience overnight, rather that we ought to be aware of certain key factors at play.

In cognitive psychology, memory can be viewed as comprising three core processes: encoding, storage, and retrieval (or recall). Encoding refers to the analysis and processing of information received via sensory input into a

construct that can be stored within the brain. There have been a couple of approaches to understanding this process, which can be termed the physiological and the mental: the first line of research examines observable electrochemical processes within the brain, while the second approach considers how the process is represented in the mind. The main types of encoding include visual (encoding images); acoustic (encoding sound); semantic (encoding information that has specific meaning or application to a context); and elaborative (the relation of new information to knowledge already stored in memory). Other forms of coding relate to tactile senses, odour and taste, and to organization and classification.

Encoded information can be stored in short-term memory and transferred to long-term, declarative memory through repeated practice and use. Short-term memory has limited capacity, though the precise extent of that capacity is subject to variability by individual and by different types of information. Where that information is “chunked”, or grouped together, more can be collected and held in memory at any given time. When sufficient rehearsal techniques are employed, information transfers to long-term memory. Retrieval refers to the process whereby information stored in long term memory is recalled in order to be applied. The ability to remember may deteriorate over time if effective retrieval practices are not exercised. The capacity to recall may also depend upon how well organized the information is, and the extent to which new information is connected to existing knowledge and understanding.

The impact on education of cognitivism focuses upon the role of teachers in ensuring that the process of encoding, storage and retrieval are made as effective and efficient as possible. For example, although cognitivists would acknowledge the importance of the environment, they place greatest emphasis on the individual and their capacity to process information. That being the case, there is more focus within cognitivist approaches on student-centred learning where individuality, and student agency in their own learning, comes to the fore. To aid in that learning, cognitivist approaches argue for organization: the removal of distractions, obsolescence, and inaccuracies; and the logical organization of materials so as to allow students to establish links and associations between new information and that already learnt. From this perspective, key information should be clearly flagged and, where possible, information should be packaged into coherent sets, whilst attempts must be made to avoid cognitive overload, or delivering too much information too quickly without allowing time for processing.

## Constructivism

The final learning theory we will consider here, constructivism, is something of an accumulation of ideas and research, many of which stem from cognitive psychology. Its popularity grew in the later twentieth century and can be compared with evolutions in other subject areas prompted by critical theory. However, many of its precepts derive originally from the cognitive psychology research of Jean Piaget and Jerome Bruner, and experiential learning advocates such as John Dewey. As with cognitivism, constructivism stresses the importance of mental activity in considering how individuals learn and engage with the world, but there is a particular focus on the meaning-making process that individuals engage with, as set against their own unique life experiences. From a constructivist viewpoint, individual understanding of the world is always contextual in that it is impacted upon by personal lived history, and this creates differentiated and subjective understanding. To put that another way, we do not simply accumulate learning; rather, we create it.

Piaget's theory of equilibration, premised on the argument that people interpret new experience on the basis of previous experience, has been significant in the development of constructivist thinking. Although a development theory specific to children rather than adults, it posits that individuals possess a mental understanding of how the world works, organized into units of knowledge called schemas. When new information is received, the individual can apply it to an existing schema if the information is aligned (assimilation), or they must either create a new schema or adapt an existing schema that will allow sense to be made of the new information (accommodation). Cognitive development, Piaget argued, comes as a result of the latter process: when new information does not fit with existing understanding, this causes uncertainty and disequilibrium that needs to be resolved through accommodation.

Equally, given the importance of individual construction of knowledge, the concept of experiential learning (learning by doing) and situated learning (where learning takes place in realistic contexts) has been influential in constructivist thinking. The work of John Dewey, in particular, has had considerable impact. Dewey advocated meaningful and democratic education that had relevance to students' lives, whilst rejecting approaches that favoured authoritarian and rote learning. Similarly, Jerome Bruner (whom we shall revisit later in this volume when looking at curriculum design) was a keen advocate of discovery learning, whereby students are given the freedom to construct their own knowledge and understanding of

a particular concept by actively exploring it and uncovering meaning, as opposed to being “told” meaning. In other words, constructivists would contend that it is not the responsibility of the teacher to transfer knowledge by rote techniques, but to facilitate a student’s own learning of that knowledge.

This is, however, a simplification of some complex and multifaceted work. Activity theory, for example, focuses on the central role of embedded practice in learning. This poses that learning is composed of several essential elements operating within a system: the learner, the task, the tool, and the rules and community around that activity. By comparison, social cognitive theory privileges the community, positioning learning as occurring primarily through observing others. Influential in both these strands was the work of Lev Vygotsky, Alexei Leontiev, Alexander Luria and others (the latter of whom founded the Kharkov school of developmental psychology). Emerging from Vygotsky’s work are four principles of learning and cognition: knowledge is constructed; that process of construction cannot be separated from social and cultural context; language plays a central role in mental development; and, somewhat as a result of those things, that learning is facilitated through collaboration by working with “more knowledgeable others”. Thus, development of conscious cognition is the result of social and cultural influences. Vygotsky emphasized language, speech, and cultural production as highly influential cognitive tools produced through socio-cultural interaction; these cognitive tools are learned and enforced through more knowledgeable others in what he termed the zone of proximal development. This can be conceived of as being the extent of what an individual is able to learn with the help of a more knowledgeable other: it exists beyond what an individual can learn on their own unsupported. Vygotsky suggested that the most effective learning takes place in this zone through processes of guided social interaction; once the individual is able to learn a particular area on their own, a new, enlarged zone of proximal development is created.

As noted above, a related influence is that of situated learning, or situated cognition, which at the time represented something of a paradigm shift in the psychology of education. Essentially the theory suggests that knowing is inseparable from doing, and that doing is inseparable from the context in which it takes place (Brown, Collins and Duguid 1989; Greeno and Moore 1993). Perhaps particularly worthy of note here is Jean Lave and Etienne Wenger’s *Situated Learning: Legitimate Peripheral Participation* (1991), which built on earlier theoretical developments in the psychology of socialization, alongside anthropological study of apprenticeship models in

a number of different communities, to draw out ideas of learning as being a social process rather than an individual one. As such, they argued, learning was best facilitated within a community while also being productive of and maintaining that community. That is to say, learning does not begin within an individual and it does not end there either: it is not “a process of socially shared cognition that results, in the end, in the internalization of knowledge by individuals, but [...] a process of becoming a member of a sustained community” (Lave and Wenger 1991, 65). One can argue with the view, but the significance of this is to move the focus of enquiry from the individual to the contexts in which learning occurs. That actually takes us back full circle to behaviourism in some ways, because there are elements of social learning which are based on observation and imitation of others. As the contexts in which our students learn shift and evolve that may be an important point to keep in mind: the way students learn is influenced by the structures and cultures of the community in which they participate.

In terms of the effects of constructivism on how we think about higher education, then, there are a number of connected points to keep in mind. Firstly, the idea of learning as a construction changes the position of the teacher in relation to the student. The teacher is no longer someone who transfers new knowledge to a student on the assumption that the student will come to understand that knowledge in the way intended by the teacher. Instead, they facilitate student encounters with knowledge, encouraging student agency in learning and enabling them to construct a viable understanding of that knowledge themselves. Secondly, and following from the former point, learning becomes individualized. Different students have different lives and different identities: they come from different backgrounds, different cultures and carry a range of values and philosophies. Therefore, some account needs to be given to how we can enable access to learning via different mechanisms and through approaches that appeal to as wide a section of our learning community as possible (the concept of inclusivity). Thirdly, and again following from the former points, learning becomes essentially a social and socially-situated activity. We should provide opportunities for students to engage with each other, to share perspectives, and to engage with the teacher (in this context, the more knowledgeable other). We should construct learning as a scaffold in the zone of proximal development, where interaction with new material is initially supported and where, in future iterations of that learning, students are asked to take more and more personal responsibility. Fourthly, the environment in which learning is encountered becomes central to that learning. Students are engaged with learning in authentic and situated environments, or