Meeting the Teaching and Learning Challenges in 21st Century Higher Education

Meeting the Teaching and Learning Challenges in 21st Century Higher Education:

Universal Design

Edited by

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Cambridge
Scholars
Publishing

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CHAPTER ONE

INTRODUCTION:
UNIVERSAL DESIGN AND HIGHER EDUCATION

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Context

It is without doubt that the higher education (HE) landscape has changed dramatically over recent years (Altbach, Reisberg and Rumbley, 2019). Some policy developments have had a direct impact on practice, such as the widening participation agenda that brings a broader range of students, particularly those from families without prior HE experience into university (Byrom, 2015). Funding arrangements have seen the cost of tuition placed firmly into students' hands, which has disrupted notions of the relationship between staff and students, where students have adopted a consumerist approach with concomitant demands (Bunce and Bennett, 2019). Students have high expectations of their staff (Morris, Swinnerton and Coop, 2019), and their higher education experience is positioned within the context of key metrics such as the National Student Survey and Graduate Outcomes. Such metrics are important as they are frequently utilised within size and shape reviews that could result in course closures or expansion depending on institutional measures of success.

Alongside key policy developments, teaching and learning practice has changed with staff adapting their practice to ensure a meaningful and positive student experience (Mathews et al., 2019). Meeting the challenges of 21st Century Higher Education therefore requires an appreciation of areas of practice that have been defined and redefined in the context of a system that has change, as its only constant. Such challenges include:

- Assessment and feedback that ensure student learning, progression and successful outcomes;

- Moving away from didactic forms of teaching and learning to active learning;
- Personalising the curriculum and feedback for all students;
- Including meaningful placement opportunities in the curriculum;
- Developing students into graduates able to enter the employment market at graduate level;
- Providing opportunities to develop key skills as a part of the course of study;
- Grappling with conceptualisations of teaching excellence;
- Developing and sustaining relationships with professionals outside the university to enhance the student experience;
- Decolonising the curriculum;
- Inclusive teaching and learning;
- Embedding digital learning into practice;
- Incorporating sustainability and climate change across the curriculum; and
- Student wellbeing and mental health.

Although not an exhaustive list, the above provides insight into a number of challenges that institutions aim to meet. Universities have responded positively to such developments and there is much good practice to highlight. For example, the student voice has increased in importance (Bols, 2020), with a number of successful Students as Change Agents (SACA) projects resulting in impactful and demonstrable change. In addition, the focus on employability has led the sector to appreciate that not all students intend to follow a career in academia and this has resulted in a range of creative and professionally aligned placements for students that has refreshed the curriculum for many.

Universal Design in Higher Education

Attention to improving the student experience has opened up the HE space for discussion and debate. Key questions arise on how university spaces are constructed and utilised to ensure a healthy and safe environment. Universal design operates on the following principles:

- Equitable use
- Flexibility in use
- Simple and intuitive use
- Perceptible information
- Tolerance for error

- Low physical effort
- Size and shape for approach and use.

Although predominantly associated with physical spaces, all seven principles have an overarching aim of reducing barriers to the learning environment and ensuring inclusivity in higher education practice (Kieran and Anderson, 2019). As a university, we have taken a broader interpretation of Universal Design and applied it to teaching and learning practice – the extent to which our classrooms and teaching practice align with the principles above.

Chapter Outlines

This book draws together examples of teaching practice from across one University – the University of Nottingham. The University is unique in its context, having branch campuses in Malaysia and China. The chapters that follow provide insights into a number of key concerns related to current practice at the University of Nottingham, drawing from experiences of staff based at the UK and China campuses.

Transition is a key point in education progression, irrespective of the age of the young person (Gravett, 2019). **David Krygier** explores this issue in Chapter 2. Focusing on the idea of "knowledge decay", he raises questions on how students can be better supported to retain their knowledge and skills following vacation periods. He effectively questions current expectations around assessment and curriculum structure that could be a way forward in resolving the issues of knowledge degradation, arguing that students also share responsibility in continuing their learning whilst away from university. In Chapter 3, **Stephen J. Waller**, takes the issue of transition further by focusing on the experiences of 10 mainland Chinese students as they transition to the UK branch of the University. He exposes the gaps that students experienced in their preparedness for studying in the UK but goes on to argue that successful transition was achieved following time for adaptation to the new cultural expectations around learning. He provides some recommendations for practice to support such transitions. **Jamie Emerson** offers a personal reflection of teaching English as a second language in Chapter 4 whilst recognising cultural practices in teaching that preceded students' university experiences. Utilising the facing up, demanding high and teaching unplugged model, issues of engagement are explored. Jamie discusses the challenges experienced with re-configuring the curriculum to not only increase student engagement, but also ensure a

smooth transition into the expectations of a global university such as Nottingham.

One aspect of successful learning in a global university classroom centres on inclusive pedagogy. Ensuring all students' needs are factored into a cohesive pedagogy approach presents challenges. **David Edwards** takes up this theme in Chapter 5. He focuses on a specific discipline area – business technology – to examine the dissonance in expectations between students and teachers. He further argues that appropriate pedagogical approaches are required to support the engagement of all learners, particularly in the context of an international classroom. Such inclusive practice is required to ensure all students feel valued and respected and a component part in the higher education space. Much research focuses on fit – academic and social – within the field of higher education, specifically around the theme of widening participation. Whether a student feels as though they belong in their higher education institution is influenced by many factors. Chapter 6 explores this theme from a different perspective than is traditionally found in the "fit" literature. **Vipin Chauhan, Andy Fisher, Helen McCabe and Helen Williams** present key issues connected with what is the experience as a predominantly "white" HE learning environment, which leads students of other groups to question why their curriculum and lecturers do not represent them and their cultural histories. They also argue that decolonisation of the curriculum is not about adding different texts to a reading list; it extends beyond that to critical questions connected with the decisions made about who gets to teach, what gets taught, why this is taught and how it is taught. This therefore presents a helpful deconstruction of HE learning and teaching practices specifically in relation to the curriculum.

Accessibility of the curriculum is currently a key area of attention. With most, if not all courses requiring course materials to be placed into a virtual learning environment (VLE), the use of such mechanisms has become an increasingly integrated component of HE pedagogy. The next two chapters explore elements of design in terms of curriculum and instruction. In Chapter 7 **Neil Hughes, Gary Fisher, Charlotte James, Hannah Jeffery, Joseph Peake and Matthew Watts** explore the use of a VLE with a focus on two discipline areas: Arts and Humanities and Engineering. They focus on the ways in which the VLE is used in a supportive, developmental and nurturing approach amongst staff. This is a particularly important emphasis, as it takes the VLE away from conceptualisations of mandatory and surveillance experiences to one in which staff can engage critically with colleagues to determine how to improve their students' digital learning

experiences. Chapter 8 explores the usefulness of instructional design for students with English as a second language. **Mattia Mania** focuses on pedagogical approaches that utilise case studies in a specific module: Introduction to Business and Management. Reporting on the development of a multimedia case study format, she highlights the approach taken which included students as active partners throughout the process.

Embedding digital learning into practice has become commonplace in HE pedagogies. In Chapter 9, **Hiroyuki Shinohara, Xu Sun, Ahmed Elamin and Ali Cheshmehzangi** explore the use of digital technologies as a fundamental aspect of teaching practice within architecture design. They raise important considerations in relation to the timing of introducing advanced digital learning tools into practice, questioning both their usability and effectiveness particularly for Foundation level architecture students. They also discuss the conflicted position in relation to the use of such tools where their use within the professional field is not consistent. This provides the backdrop for Chapter 10 in which **James Walker, Dave Towey and Lauren Knowles** explore the usefulness of technology in pedagogical approaches. In particular, they focus on the challenges associated with the integration of technology into teaching practice where the design of such tools does not align with pedagogy. It is however clear that technology is seen as an important vehicle through which learning should and does take place.

Various models exist of how students learn, and despite criticisms levied at learning style theories in particular, they serve as a useful tool for exploring inclusive learning practices. In their chapter (Chapter 11), **Emma Whitt and Mark Haselgrove** explore the connections between animal and human learning. Utilising well-known studies in the field of psychology, they explore two key concepts of learning – time and error – to determine how such models apply to human learning. Partnership working is increasingly viewed as important to HE learning and teaching, where students are valued for what they bring to the learning environment. **Tiffany Yu, Clayton Austin, Murtaza Faruquee and Neil Smyth** explore this theme in Chapter 12. As librarians, they are uniquely positioned to work with students across all Schools and Departments. Although they focus on Echo360 as a tool to support learning, they bring a fresh look at the work of Hattie (2009) where students are viewed as co-constructors of their learning experiences. This work is important given the cultural context within which the work was completed.

Beverly Allan and Tamsin Majerus continue with the theme of students as co-constructors of their learning experiences in Chapter 13. Assessment and feedback form an area of focus within HE practice. Assessment and feedback consistently score low on the NSS. This chapter reports on a project that trialled an alternative format for providing feedback to engage students with their grade and the comments provided. They provide insights into both student and staff experiences making some clear recommendations for practice in this important area. **Lyubomira Gramcheva** (Chapter 14) continues with the theme of feedback, providing a case study that explored the redesigning of feedback procedures with the specific aim of developing students as self-regulated learners. An additional benefit of the work included a reduction of staff time, whilst also improving meaningful feedback for students. This honest and reflective account highlights on-going issues with feedback whilst also providing some areas of amendment practice that met the intended aim of the project. **Mike Clifford** takes a different angle on assessment and feedback by exploring revision practice in Chapter 15. He identifies the lack of literature in this area and reports on strategies that can be helpful in supporting students with examinations. Importantly, suggestions are made for teaching and learning practice, based on student feedback. These suggestions could enhance ways in which university staff utilise pedagogical approaches to prepare their students for examinations in light of the fact that at this stage of their education journey, students want to play less of an active role in their learning: they welcome teaching and learning strategies that tell them exactly what is needed to do well.

Increased autonomy in learning is expected as students transition through their degree programme. The fundamental principle is that they will be prepared for life beyond university. The theme of employability has gained increasing attention, particularly with the Destination of Leavers from Higher Education (DLHE), now Graduate Outcomes, being a key metric on which the value of a course is measured. **Judith Wayte** explores this theme in Chapter 16. She articulates the curriculum changes that facilitated the inclusion of employability skills into a programme. This is no easy task as students tend to be highly sceptical of learning that takes them beyond their immediate subject discipline knowledge requirements. Judith emphasises the importance of reflection as a professional tool and highlights how this important component of professional work is embedded into the Food Science and Nutrition programme. Chapter 17 provides further insights into the key issue of employability. In this chapter, **Xuan Feng, Martin Lockett and Joon Hyung Park** acknowledge the challenges faced by graduates in China with a saturated employment market. They further

develop the theme of employability by exploring the importance of partnership working amongst students, employers and universities, but also the idea of longer term progression and reaching future goals as an outcome of a student's higher education experience.

The final chapter (conclusion) draws all the main themes together and provides summary thoughts on current practices in higher education.

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CHAPTER TWO

REASONS FOR KNOWLEDGE DECAY IN HIGHER
EDUCATION AND POSSIBLE SOLUTIONS

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Introduction

Student academic performance is subject to fluctuations during the year. It tends to increase leading up to an exam period and decrease afterwards, especially over holidays. Taking time off study between semesters is necessary to reset and recharge. The most common breaks in between semesters at most universities last approximately 4 to 6 weeks in winter and 2 to 3 months in summer. For the majority of international students in the United Kingdom (UK) these breaks are an opportunity to visit family and return to their home countries. They often approach their holiday without a clear strategy on how to best retain the skills and knowledge they have gained. Further, during these periods they are often faced with limited exposure to English language and academic skills. Consequently, some "unlearning" as well as a loss of academic skills is likely to occur. It is crucial to understand the impact of such degradation of knowledge and skills to be better able to address this problem in international higher education. Research into this area, labelled as "knowledge decay", is rather scarce. An early study by Cook (1948) showed a degree of deterioration of reading skills in primary education. More recent research has indicated that knowledge decay occurs most often in younger or less mature learners but also language courses and in low ability students (von Drehle, 2010; Dills et al., 2015). However, these studies were conducted in teenagers and covered only specific subjects and did not address academic skills. In order to investigate knowledge decay in higher education, research was carried out among the foundation year students at the University of Nottingham Ningbo China (UNNC) to measure the regression of academic skills between semesters. The students were tested at three time points – at the end of the autumn semester, the beginning of the spring semester and finally

after the summer holiday, with at least a nine-week gap in between each test. They completed a writing task that assessed their reading and summarising skills along with their use of academic style, grammar and vocabulary. Regression in skills was observed in approximately a third of students. This is consistent with the existing research in high school students but, interestingly, this loss of academic skills was observable in both high- and low-ability students. These findings indicate that this issue may not be limited to weaker learners and it is therefore pertinent to investigate some possible reasons for knowledge and skills decay in higher education.

Transition into independence

Starting university can often be a very overwhelming experience and certainly an important life event. First-year students, however, lack independence and responsibility for their learning as many often find it challenging to adjust to the new learning environment (Ross et al., 1999). This might be linked to different expectations, especially due to differences in educational background. Some learners are often used to teacher-centred lessons and find a lack of strict supervision and direct instructions difficult to adapt to. This is very common in students from educational backgrounds rooted in didactic cultures joining a typically western style education, after spending over a decade in a much more controlled environment (Ryan and Louie, 2007; Yin et al., 2015). This new way of learning demands higher levels of learner autonomy. These expectations are often outlined from day one but very little initiative has been offered to help new students to meet them and consequently, they tend to struggle to cope with novel expectations of managing their self-study. These skills are often learned the "hard way" as universities across the board fail to acknowledge the lack of learner autonomy in freshmen. While difficult to teach directly, independence should be developed through the regular exercising of sub-skills that contribute to achieving the status of autonomous learner.

No time for time management

Lack of time management skills has been widely highlighted by many HE tutors who often complain about poor study skills and last minute revision. Students are quick to blame the congestion of deadlines, but with the help of careful planning and effective time management such issues could be avoided. These essential study skills, however, are not typically embedded in curricula and that in itself seems to be the root of the problem. Experts seem to agree that a series of well-planned revision sessions, which involve

studying for shorter periods of time more frequently, can have a more beneficial effect on knowledge retention compared to last minute exam revision (see, for example Rohrer and Pashler, 2007). Students' organisational competence is often poor and can point to problems with time management. A lack of such skills has recently been attributed to heavy smartphone users (Kibona and Mgaya, 2015; Lee et al., 2015). So ubiquitous in the classroom, mobile phones are seen as a learning buddy, or at least as a helpful learning tool, by many learners. In higher education, which relies heavily on virtual learning environments (VLEs) and online learning, their frequent use is deemed necessary but very little attention is paid to the negative consequences of their overuse. This has come under the spotlight in a recent study conducted at UNNC measuring the effects of restricted smartphone use on study skills, focus and time management. This research has identified a wide range of negative outcomes, mostly linked to short overall study time compared to an average of just over five hours of screen time outside the classroom. Smartphones can certainly be utilised as a learning platform but this was only the case in very few subjects. In addition to this, these devices can severely affect the ability to focus and have been found to shorten the attention span. In those who lack time management skills, overuse of mobile phones can further exacerbate the problem of limited time devoted to study. In certain contexts, smartphones have been banned from schools, while at universities they have a novelty factor that may further attract students deprived of mobile phone use in the past. In many, such overuse can be classed as borderline addiction fuelled by gaming and various means of online interaction. Such online activity has been very often reported during lectures. Outside the classroom, smartphones can lead to frequent distractions that are likely to affect study skills and learning efficiency commonly reported by UNNC students.

Preparing to fail

Exam preparation has been a subject of much debate for centuries (see, for example Pauk, 1989; van Etten et al., 1997). The majority of students use traditional revision methods as their main way to consolidate knowledge and these often include reviewing lesson content, lecture notes and course books. The literature suggests that for many, these remain the only known methods of exam preparation, perhaps with the exception of rote learning and memorisation, widely used in East Asian culture (Aoki, 2008). While there is some truth to this, memorising content implies a lack of understanding, whereas this is rarely the case. Still, the most common way of exam revision, namely reviewing notes or a course book, can create an

impression of high knowledge retention and provide learners with a comforting sense of confidence in their abilities ahead of the exam. Being barely challenging, this method can provide students with a false representation of their state of knowledge. A recent study at UNNC investigated the use of recall as a means of exam preparation. This method, somewhat neglected in academia, was used by learners at the beginning of each week over the course of a semester and forced them into regular reflection and weekly revision. The students found this experiment to be mostly helpful as a vehicle for identifying gaps in their knowledge. Only a few showed some awareness of different methods of revision, such as summarising content learned during lessons, having a learning buddy or belonging to a study group. Such a limited repertoire of revision skills can have a detrimental impact not only on the assessment outcomes but, more importantly, on knowledge retention. Bunce et al. (2011) found that these shortcomings are likely to contribute to knowledge decay that occurs over a short period of two weeks after a completed assessment. This therefore suggests that knowledge decay is an issue for students who are relatively instrumental towards their studying.

Re-assessing assessment

One aspect that can offer some help to bridge the gap between dependence and autonomy is assessment. The majority of HE students seem to be focused on achieving high grades rather than acquiring knowledge and academic skills and this is very deeply ingrained in the Asian culture which emphasises exclusively summative assessment and high stakes attributed to education (Lee and Coniam, 2013). Both aspects are widely attributed to having negative effects on learners (Jones, 2010). At the same time, it is also clear that such a strong focus on assessment can promote motivation and learning (Black and William, 1998). Nevertheless, the literature suggests that "teaching to the test", which has become more common since the 1980s, can be detrimental to knowledge retention over time (Sloane and Kelly, 2003; Bunce et al., 2011). To mitigate this problem, Jones (2010) points to greater learner involvement in the learning process. It is argued, however, that such engagement cannot be expected from students who have relied on their teacher throughout their education, thus having implications to a global university located in an Asian culture, such as UNNC.

Experts seem to agree that current assessment practices need to evolve to address the issues outlined above. Recent trends in this area have seen changes in assessment structure, evolving toward more portfolio-type

projects (Carless, 2015). Some benefits of such assignments include a clear structure divided into stages along with deadlines, which motivate students to manage their time more effectively as they can focus more on individual development (Wolf, 1989). With an added degree of supervision by the teacher, who monitors progress and provides feedback, this personal growth is enabled as students are more likely to reflect on their learning and identify their strengths (Monson and Monson, 1993). While these gradual changes can reduce the number of exams and tests, high-stakes assessment is yet to become a thing of the past. While it is still unclear if these trends in assessment improve knowledge retention, they have been praised for having a positive effect on the mental health of learners. Student wellbeing, or rather its decline, appears to be correlated with exam stress (Nichols et al., 2006; Encandela et al., 2014) and such "exam hell" seems prevalent across East Asia (Komatsu and Rappleye, 2018). "Test anxiety" mostly stems from poor time management but the reverse also seems to be true (Macan et al., 1990; Ho and Crookall, 1995) as fear of failure paralyses students (Schafer, 1996) likely leading to a decline in their mental health. While small amounts of stress are linked to greater alertness and more favourable assessment outcomes (Jones, 2010; Nichols et al., 2006), higher levels of test anxiety almost inevitably result in decreased cognitive function (Encandela et al., 2014) and poor overall achievement. The complexity of this situation is not always apparent from the perspective of the educators but it encompasses a wide range of problems in its current form that resembles "assessment of learning". Many experts lean towards more sustainable assessment practices or "assessment for learning" (Boud, 2000; Nguyen and Walker, 2016; Dai et al., 2020) with a much wider utilisation of formative tests in order to lower the perceived stakes attached to academic performance. These can perhaps be paired with summative assessment to add depth and provide a wider variety of testing methods, and this in turn should lead to a more "learner oriented" approach (Carless, 2014) that fosters learner autonomy, especially if students are exposed to real-life situations (Nguyen and Walker, 2016). Using such scenarios in assessment adds authenticity as they often involve skills needed in future employment. These considerations are important as they can boost student engagement along with extrinsic motivation, increase knowledge retention and transform dull and stressful assessment routines into "lifelong learning" (Nguyen and Walker, 2016, 98).

e- and outside the classroom learning

In addition to more sustainable assessment, there are various other methods of increasing student engagement outside the classroom that could

consequently prevent knowledge decay. Due to the nature of the problem, VLEs (e.g. Moodle, Blackboard) are best placed to offer some solutions. This online space can provide a "one stop shop" for students looking to review their knowledge or practise academic skills. Dills et al. (2015) suggest relearning or reviewing for low ability students to provide some exposure to the material covered in the previous semester. A similar approach utilising e-homework has been found to improve assessment results in high school students, if used regularly (Mason, 2015). Establishing long-lasting individual learning habits in the first year of higher education, often linked to greater retention of knowledge, seems to be largely neglected by educators, whose oversight is expected by the majority of international students. Perhaps in the initial weeks, educators should provide more guidance and specific suggestions of how students should or indeed could manage their learning, as this period is crucial in the process of the development of good study habits that may then develop and endure over time.

Reshaping higher education

The most obvious but difficult intervention to mitigate knowledge decay over time is changing the structure of an academic year. While this area is yet to be studied in higher education, it has been heavily researched in tertiary education. Experts suggest the inclusion of summer school courses (Cooper, 2003; Cooper et al., 2003) or even year-round schooling (McMullen and Rouse, 2014), more in line with the Japanese educational system which requires students to attend classes for 240 days a year (NECTL, 1993). Incorporating more frequent but shorter breaks has also been proposed, as well as the inclusion of bridging courses (Cooper, 2003). These changes have been welcomed by both educators and parents but, thus far, all these approaches have shown little impact on knowledge retention as more research into alterations to the academic calendar is needed. In addition, there are specific difficulties attached to higher education provision in an institution, which is underpinned by a "one university, three campuses philosophy" where such structural changes would be challenging to implement. This was notable during a Transition Project that highlighted the issues surrounding student transition into university and sought to address the issue of knowledge decay through structural changes to the academic year.

Bridge that gap

A smooth transition into university is particularly crucial at UNNC as the first semester provides a foundation of academic skills and the second focuses on language used in a particular field. In order to "bridge the gap" between semesters and provide some exposure to course content during the holiday period, a pilot program has been implemented in which students were given a short activity to complete during their winter break. The task required learners to write a paragraph based on a short academic text and video input. Students were also signposted to various academic skills in a slightly less direct task. They were advised, for example, to watch TED talks and revise their coursebook. These interventions were mostly unsuccessful as student engagement was low, with the exception of modules, which included the main task as part of an assessment. This provided a much-needed incentive, resulting in 100% engagement and the successful completion of the assessed task overall. This indicates that incentivising students through an assessed task, seemingly a desperate method, can sometimes be a successful approach in the battle to combat disengagement or lack of motivation.

Beyond transition

Outside of the Transition Project, many EAP courses for the Foundation Year students have developed bespoke bridging courses at the end of each semester, with other modules to follow suit. In addition to this, an @UNNC initiative has recently been launched by Coaching and Support (CAS). These weekly student-centred seminars have been very well attended as they offer students a chance to discuss their learning as well as university skills with their peers. Workshops on time management have attracted the highest attendance figures so far, highlighting a particular need of foundation year students in this area. Regarding the impact of recent changes to assessment university-wide, a number of modules have adopted a portfolio style assessment instead of traditional exams. These have seen greater engagement and reduced failure rates as weaker students are closely guided by their tutor throughout the process and have the opportunity to apply their knowledge in a less formal context. Such guidance combined with clearer course structures can certainly benefit individuals lacking autonomy or time management skills.

Conclusion

Knowledge decay is an important issue in higher education and influenced by numerous factors. As discussed in this chapter, student autonomy has some bearing on a student's capacity to learn and retain information but there are also cultural factors that influence approaches to studying that cannot be underestimated. As I have argued here, reconfiguring the academic year is not a realistic option in a global university such as the University of Nottingham and alternative approaches to support student learning need to be considered. These include embedding time management and effective study skills into the undergraduate curriculum. In addition, amendments to assessment practices may go some way to supporting students with different cultural expectations of learning. In an era of online learning, traditional higher education with its rigid structure appears to be set in its ways, which can be a push factor for many young adults. Recent proposals put forward by the UK government, if successfully implemented, would see some degree courses reduced to just two years, which may be a sign of things to come. Until then, educators should better acknowledge the fast-changing needs of students across a more internationalised higher education landscape.

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Chapter Three

The Importance of Learning Dispositions in the Transition from a Chinese Learning Environment to UK Higher Education

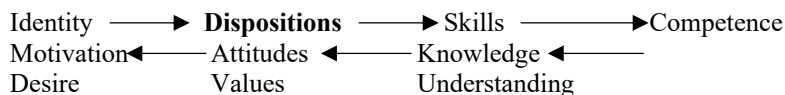### Stephen J. Waller

Introduction

This chapter discusses research which followed the transition of 10 mainland Chinese master's students from Chinese universities to a transnational UK branch campus within China (UKBC). It shows that while learning experiences before the master's study normally played a crucial part in their preparation, those at their Chinese institutions did not usually provide the appropriate learning dispositions required for UK academic study. However, given time to adapt their learning dispositions, these students could succeed in the new learning environment. This chapter explains this phenomenon using Bourdieu's concepts of habitus and hysteresis. Firstly, these concepts are introduced, followed by the research method. Then key findings are discussed, and finally recommendations given.

Theoretical Framework

The theoretical framework for this research was based on habitus and hysteresis. One of Pierre Bourdieu's "thinking tools" (Wacquant 1989, 50), habitus is defined as an "open system of dispositions" which is constantly affected by experiences that either reinforce or change its structures (Bourdieu and Wacquant 1992, 133). An individual whose habitus is entirely adapted to its environment has what Bourdieu calls a "practical sense" (Bourdieu 1990, 59); in other words, they understand their

surroundings, can anticipate events and act appropriately. They have what Bourdieu calls a "feel for the game" (1990, 66).

A disposition, according to Crick (2010, 181), is "a tendency to behave in a certain way in a particular context", and can be recognised "in the action a person takes in a particular situation". Learning dispositions can be regarded as tendencies to learn in specific ways in particular contexts. Crick (2010, 182) explains that a disposition is "embedded in sociocultural, historical, and ethical narrative and includes a sense of agency, intention, and capability in real-life contexts of achievement". She adds that dispositions are "part of a complex process of sustainable, human learning and change over time" (2010, 183) with the aim being competence in a certain context (e.g. a competent learner). Figure 3.1 shows dispositions within this process.

Identity ——→ **Dispositions** ——→ Skills ————→Competence
Motivation◄——— Attitudes ◄——— Knowledge ◄———
Desire   Values   Understanding

Figure 3.1: Dispositions within the process of learning (based on Crick 2010)

This research showed that specific skills, knowledge and understanding were particularly important factors for the participants in the process of gaining competence in their new learning environment; however, without the required dispositions, they sometimes initially failed to utilise, or even realise, the usefulness of these factors. It should be noted that skills are often needed for dispositions; however, as Katz and Raths (1985) point out, an individual can have a skill but rarely use it; a skill is something that an individual has or does not have, while a disposition refers to frequent actions, such as using a skill.

According to Bourdieu, dispositions are durable and once they become almost fixed in the habitus (i.e. during childhood), adapting them can be challenging. If individuals are in an environment to which their dispositions are suited, then they understand how it works and what to do in order to succeed. However, entering a new environment means their dispositions may not be suitable, such as many Chinese students entering UK Higher Education (UKHE). They may be unable to anticipate events properly or react appropriately. This leads to the process called hysteresis in which dispositions can adapt to a new environment, but time is often needed. According to Yang (2014), adaptation begins with the "noticing" of a mismatch compared to what is required in the new environment; this