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Preface

The What, Which, Why and How of Motivation

Motivation of students in higher education is clearly an important topic. Educators are often asked questions like the following:

What is motivation?
Why are students motivated to enrol in higher education?
How do students choose which degree at which university?
How can teachers motivate students to learn?
Why are some students motivated to graduate with flying colours, while others drop by the wayside?
How does the curriculum impact on motivation?
Which systemic issues are important?
How can we better understand cultural differences in motivation?

Responding to such questions is not easy. There is an abundant literature on motivation, but many contested issues and competing theories. It is not straightforward to select a particular body of research or theory to answer the above questions. A substantial part of the motivation literature deals with younger students or the workplace; so it is not always clear how applicable the findings would be to university students. Much of the research has been conducted through short-term trials or experiments, therefore the findings might not extrapolate to motivation in natural settings over the time it takes to complete a degree.

There seemed to be sufficient unresolved issues in the literature associated with motivation in higher education to justify conducting a study of the motivational orientation of university students from an open or a naturalistic perspective. What transpired from such a study might well relate to the existing literature, but if this was the case there would be further justification for the findings. The strategy would be that of an exploratory study in which the results were related to theory, rather than a theory-down study. This approach would have the additional benefit of

exploring which of several competing theories of motivation were most relevant to higher education, which seems appropriate as most were derived from other sectors.

This book, therefore, reports on a set of inter-related projects which took a fresh naturalistic examination of the motivation of students in higher education. The aims of the projects were to investigate what motivated students to go to college, select the course they had enrolled in and work at their studies during the course of their degree. In doing so it collected evidence of approaches to teaching and learning and curriculum design which appeared to motivate students, thus deriving some guides as to how to design learning activities and curricula which can motivate students.

From the studies, two motivational models are developed. One is a model of the nature of motivation. It is an integrative model which brings together six facets of motivation. It relates to many of the other models of motivation in the literature. This model can be used to consider why students choose to enrol in university courses and the nature of their motivation to study. It can relate to issues like why some students work really hard and are successful, while others show little commitment.

The other model is one of how teachers, teaching and learning environments and assessment can motivate or de-motivate students. Again this is a multi-faceted model which takes a comprehensive view of teaching approaches to motivate student learning. It does this by taking a broad interpretation of what is encompassed by a teaching and learning environment.

The book then uses the two models to interpret a substantial body of data from three differing groups of students in higher education. The interpretation results in attempts to answer the questions posed above. By interpreting the data through the two models, an integrative approach results in which diverse issues are examined through the same framework.

Acknowledgements

The research, on which this book is based, was conducted on three sets of students in Hong Kong; traditional undergraduates, community college students and those in taught postgraduate awards. The work set out as an attempt to take a fresh holistic examination of motivation in higher education. Timelines from grant-awarding bodies demanded publications during the terms of the separate awards. Journals restrict the length of articles and prefer them to stick tightly to clearly stated themes. The results from the holistic study, therefore, ended up being reported in a very bitty way.

This book, therefore, re-examines the whole body of data. Being able to look at the whole body of the interview data enables fresh insights and brings the coherence consistent with the original holistic goal.

The very revealing interviews for the three studies were conducted by Celina Hong, Amaly Ho and Amber Ho. Just about all the interviews were in Cantonese. These very talented research assistants then listened to the interview recordings and typed out fluent transcripts in English. Without their invaluable help the research would not have been possible.

Contents

Chapter 1
The Studies

The Hong Kong Education Context

This book is based on research into students in the higher education sector in Hong Kong. It, therefore, makes sense to start with an account of the education system in Hong Kong, to provide a contextual background for the reader.

Schools

At the time the research studies described in this chapter were conducted, the school system in Hong Kong was undergoing reform. Secondary education was being cut from seven years to six to allow the normal length of undergraduate degrees to rise from three to four years. The changes in structure were accompanied by major attempts to reform curricula and assessment to try to address a widespread perception that the entire education system had a narrow focus on trying to perform well in the series of externally set examinations.

That there is a focus on the examinations is hardly surprising given their importance in a highly selective system. Schools are classified into three bands by ability, with a hierarchy within the bands, particularly the top one. Pressure to do well starts as early as kindergarten as parents want their children to perform well in the tests used determine entry to the best primary schools. There is a through train policy; so the best primary schools tend to feed students into the secondary schools with the best records for getting their students into university.

The impact of the selective and competitive system is reinforced by the traditional Confucian respect for education and teachers. Lee's (1996) review of the writing of Confucius on the topic of education observes that the term learning pervades the *Analects* to the extent that it might be interpreted as a book of learning. The philosophy traditionally became enshrined as cultivation of the self and

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scholarship to provide a preparation for government office. This is definitely a tradition which lives on in Chinese societies.

An illustration of both the importance attached to education and the pressures placed on students lies in the flourishing tutorial schools. Once regular school finishes, many students head off to tutorial school. These offer condensed tuition concentrating on what is likely to come up in examinations and providing model answers. The most popular tutors command high salaries and near pop star status, with large promotional posters on the back of buses and advertising hoardings.

Universities

The competitiveness of the education system in Hong Kong reaches towards its apex with the selectivity of entry into the seven universities funded by the University Grants Council (UGC). Only about 17 % of an age group gain entry to one of these universities, with a further 1 % entering the UGC-funded Hong Kong Institute of Education, which aspires for university status, but has so far been refused it.

The seven UGC-funded universities are listed below according to the commonly used category scheme.

Research intensive
University of Hong Kong
Chinese University
University of Science and Technology
Former polytechnic
Polytechnic University
City University
Former liberal arts college
Baptist University
Lingnan University

The three research intensive universities have all appeared in the top fifty of world university ranking lists. The two former polytechnics were both founded when Hong Kong was a British colony; modelled upon polytechnics in the UK. They have both successfully made the transition to university status concentrating on degrees in applied professional fields and with good research records in these fields. The remaining two universities are smaller and follow the American liberal arts tradition. Baptist University was founded by the religious group; Lingnan has a strong tradition in local Chinese culture.

The universities come under the jurisdiction of the UGC. This was constituted along the lines of the corresponding UK body to ensure that the universities in Hong Kong were of a comparable standard to those in the UK. As the handover of Hong Kong to mainland China approached, the UGC was strengthened with an international membership of prominent figures in higher education. There was

determination to ensure that the universities in Hong Kong continued to be governed and operate in line with best international practice. Mainland China has recognised the benefits of this status and has accepted the autonomy.

Undergraduate students are nearly all recruited directly from secondary school with selection relying almost entirely on the external examination results. Entry levels for each university and for courses are capped by the UGC. These caps restrict entry to a small proportion of an age group which fuels the competitiveness described above. It also means that the undergraduate population has not diversified as it in most Western countries. All of the universities have been keen to recruit international students in line with the move towards globalisation of higher education, though, the UGC places a cap on these enrolments too; so numbers remain below those in countries like the US, UK and Australia where universities rely heavily on international students for financial solvency.

All of the universities offer an extensive range of taught postgraduate (TPg) courses; so one of the three studies concentrated in students in these courses. TPg students are mostly mature students, often studying subjects related to their professions. Most of the students are part-time. Courses are mainly taught face-to-face with classes in the evening or at week-ends. Levels of enrolments in TPg courses are substantial, presumably influenced by the Confucian respect for education, though it is hard to obtain reliable data from other countries to make comparisons.

Community Colleges

The cap the UGC places on enrolments in undergraduate degrees in the universities it funds and the strong desire for higher education created a huge unmet demand for post-secondary education. Unrolling in an overseas university was an expensive option which many could not afford. Distance education degrees were offered by the Open University of Hong Kong and offshore providers but the mode of study did not suit school leavers (Kember 2007).

To try to satisfy the unmet demand, the Hong Kong Government encouraged the development of a community college sector. Typical of the Hong Kong Government it did not provide funding for the colleges, rather insisting that the sector operate on a self-funding basis. Colleges have been founded by a mix of providers including the universities continuing education units, charitable foundations, the Open University of Hong Kong and vocational colleges.

The main offerings of the community colleges are two-year associate degrees. These associate degrees were widely seen by students and parents as offering a second chance to gain entry to a UGC-funded university. However, few university places were specifically allocated to associate degree holders and the universities preferred to continue recruiting high-flying secondary school students. The community colleges have, therefore, started offering top-up degrees which take two years of study to convert an associate degree into an undergraduate degree.

The community college sector, and the systemic issues associated with it, is discussed in depth in Chap. 8.

Generalisability

A combination of the globalisation of higher education and the measures in place to ensure that the UGC-funded universities follow best international practice, means that the universities in Hong Kong are typical of good quality universities elsewhere in the world. The community colleges are based on those in the USA. Hong Kong might, therefore, be seen as having a two-tier higher education system, similar to that of the USA, with its four-year colleges and the community colleges offering two-year associate degrees. This is a particularly apt comparison now that the educational reforms have converted the normal duration of an undergraduate degree into four years.

As the UGC-funded universities constitute an elite system, undergraduate students in Hong Kong resemble those in the West prior to the expansion towards mass higher education. The community college students are similar in nature to those who have gained entry since the expansion. Having the two types of students in the educational system in identifiable groups opens up some interesting possibilities for analysis and discussion. Chapter 5 deals with motivation to study by contrasting undergraduate and community college students. Chapter 8 examines systemic issues through an analysis of the expansion of the community college sector. The motivation of community college students is compared to the undergraduates.

The universities in Hong Kong closely resemble good quality universities elsewhere. The community college sector is based on that in the USA and similar to the second tier private colleges which have recently been formed in some Asian countries. It, therefore, seems reasonable that the two motivational frameworks presented in this book should be applicable in parts of the world other than where the data were gathered.

Eisner (1991, Chap. 9) argues persuasively that generalisation from qualitative analysis can take place through processes other than the formal inference of statistics. His argument is that in real life we use the processes of *attribute analysis* and *pattern matching* to draw conclusions from our experiences. Attribute analysis utilises attributes or characteristics of an object or phenomenon to identify it as a member of a class we have previously experienced. Pattern matching draws upon the relationship between parts of an image or phenomenon. If these appear to have a similar formation to one we have experienced before, we might conclude that it has similar properties. In both cases we commonly draw conclusions based on partial evidence. In daily life we draw on these processes to make deductions related to our previous experiences. Eisner argues that similar principles can be used to make useable generalisations from qualitative data. The conclusions may be more

tentative than those from formal inference, but quantitative studies often exaggerate the extent to which they have followed the processes of formal inference.

Three Sets of Students

Data for the book were gathered from three sets of students in Hong Kong. Throughout the book these three groups will be labelled as:

- Undergraduate
- Community college
- Taught postgraduate (TPg).

The first group were undergraduate students from universities in Hong Kong funded by the UGC. This set of seven UGC-funded universities can be interpreted as constituting an elite university system, with only about 17 % of an age-group finding a place in the universities. The large majority of these undergraduates enter university directly from secondary school, so can be envisaged as traditional undergraduate students, similar to those in Western countries before the advent of mass higher education.

The second group were students enrolled in a recently-founded community college sector. These were mostly students who were unable to gain a place in the UGC-funded universities. As such they could be equated to the expanded intake to higher education in Western countries since the expansion from elite to mass higher education.

The third group of students were enrolled in taught postgraduate (TPg) awards. Many of these were studying part-time, often in awards related to their careers. This group represents a rapidly growing sector worldwide.

Undergraduates

There are seven universities in Hong Kong, funded by the UGC. In addition the Hong Kong Institute of Education is UGC-funded. The universities can be divided into three classifications, by a category scheme which would resonate with many other parts of the world;

- research intensive
- former polytechnic
- former liberal arts college.

As there are only places in undergraduate degrees in these seven universities for about 17 % of an age group, Hong Kong can still be interpreted as having an elite university system (Kember 2010), as most of the Hong Kong population do not regard the community colleges as being part of the university sector, even if other

jurisdictions treat community colleges as within higher education. The very large majority of places in undergraduate degrees go to those who achieve the best results in the external examinations sat at the end of secondary school. Most students go directly from school to university. The students might then be envisaged as traditional university students in Western countries, in the days before moves towards mass higher education made the student body more diverse.

Sample

Individual interviews were conducted with 36 undergraduate students in the UGC-funded universities. All were conducted in the early part of the third and final year of study. These students could be expected to recall their initial orientation to enrolment, which turned out to be the case. All interviewees were able to give lucid rationales for deciding to become a university student and selecting their programme, as will be seen from the typical quotations in Chap. 4. This was a momentous step in their lives and the reasons for taking it were remembered. They were able to look back and reflect on how their motivation had changed as they progressed through their course and what had driven them to study. They were also able to discuss how the curriculum and the prevailing teaching and learning environment of the department had influenced their motivation as the course had progressed. The single interview was, therefore, able to cover all of the aspects of motivation introduced in the preview.

In order to be able to build detailed and verifiable case studies of departmental teaching and learning environments, four students were interviewed from each of nine departments or courses. To make the sample representative of the universities in Hong Kong, and of those in most other countries, three programmes were selected from each of the three types of university. The disciplines or departments selected were chosen to be typical of the type of university and to give a reasonable overall coverage of major discipline areas. Each course is given an abbreviation to identify quotations and the students from that discipline are given a code from 01 to 04 to distinguish them.

research intensive	*former polytechnic*	*former liberal arts college*
Pharmacy (PHAR)	Occupational Therapy (OT)	Maths (MATH)
Chemistry (CHEM)	Mechanical Engineering (MENG)	Communication (COMM)
Social Work (SW)	Hotel Management (HTM)	Business (BUSS)

Further information about the undergraduate sample, the interviews with them and the analysis of the data is given in Kember et al. (2008a, b), (2009) and (2010).

Community College Students

The low proportion of an age group entering the UGC-funded universities had, for a long time, left many looking for alternative ways to continue their education after completing school. In a community which highly values education (see Chap. 9) a very substantial proportion of school leavers wished to continue into higher education. Two avenues were followed. Many went overseas to take an undergraduate degree. Others studied through distance education in Hong Kong, with the largest number enrolled in the Open University of Hong Kong.

More recently the Government has encouraged the provision of places on a self-funding basis by community colleges, continuing education providers, vocational colleges, open universities and the like. For convenience these institutions will all be referred to as 'community colleges' in this book. The places are mostly for two-year programmes leading to associate degrees or higher diplomas.

Those continuing their education in the community college sector can be said to have the characteristics of entrants to a mass higher education system as the majority of school leavers continuing into post-secondary education now enter this form of higher education. The population of students in higher education in Hong Kong is now more similar to that in countries which have attained mass higher education. The community college students were likely to display more diverse forms of motivation than the undergraduates in the elite UGC-funded universities; so it seemed appropriate to include a sample of community college students in the study of motivation.

The community college sector is described and discussed further in Chap. 8, as the impact on motivation of this new type of post-secondary provision is explored at the sector level.

Sample

Individual interviews were conducted with twenty-five students. Four students were selected from each of six streams in six colleges, plus one additional student. There were a variety of types of institution, but all were offering awards consistent with what has been referred to by the Government as the newly emerged community college sector (Education and Manpower Bureau 2001). It is, therefore, both convenient and appropriate to refer to them all as 'community colleges'. In Table 1.1 each is given an abbreviation from CCA to CCF, which is used to denote the source of interview quotations. Again, the particular student is identified by numerals.

Most of the programmes offered by the community colleges are of two years duration, leading to the award of an associate degree or a higher diploma. The disciplines studied were a representative range, since the disciplines offered are restricted to a limited number with a vocational orientation, and all programmes

Table 1.1 Interviewees from the community colleges

Programme provider	Level of award	Discipline	Number of students
Continuing studies provider (CCA)	Higher diploma	Translation	4
Community college 1 (CCB)	Pre-associate degree	General studies	4
	Associate degree	Chinese medicine	1
Community college 2 (CCC)	Associate degree	Information technology	4
Open university (CCD)	Top-up Bachelor's degree	Business administration	4
Vocational college (CCE)	Diploma	Vocational studies	4
Vocational institute (CCF)	Higher Diploma	Real estate and facilities management	4

contain a substantial component of general education. Pre-associate degrees were offered to those unable to obtain a place for the final two years of secondary education. These programmes are no longer offered, as the restructuring of secondary education has meant that places are now available for all who wish to complete secondary education. Top-up degrees are offered to those who complete an associate degree and wish to go on to complete an undergraduate degree, but are unable to obtain one of the very few places in the UGC-funded universities open for articulation. More information about these types of provision is in Chap. 8. Details of the programme providers, disciplines and the number of interviewees are specified in Table 1.1.

Further information about the data collection from the community college students is given in Kember et al. (2011).

Taught Postgraduate Students

Worldwide, there has been a substantial growth in the number of students taking TPg courses and in the number of such awards offered. The growth has been so substantial that many no longer see the undergraduate degree as a terminal award. The Bologna accord attempted to make university education more consistent across Europe by agreeing a two-part structure of an undergraduate degree followed by masters degree in 4 + 1 or 3 + 2 year sequences. The accord has had a major impact on the structure of higher education and its influence has spread well beyond Europe.

A substantial proportion of TPg awards are in professional areas. As undergraduate degrees have become broader and focussed more on generic graduate attributes, those entering a profession have found it more necessary to take a TPg

programme to obtain the advanced knowledge and skills of a specialist within the profession. Most TPg programmes, therefore, focus on an area of advanced specialisation. The subject will be studied in-depth to acquire the knowledge and skills required by professionals or those with expertise in the field. Those taking professional TPg awards are often practising professionals within the field of the chosen programme. This implies that most have to study in the part-time mode. They are normally mature students returning to study, with a significant gap since completing their undergraduate degree.

Obtaining reliable numbers for TPg enrolments seems harder than for other sectors, but Hong Kong may be one of the leaders in the growth of TPg students. It is quite common in Hong Kong to come across people who pursue postgraduate study on a part-time basis. Most classes are arranged in the evening to accommodate the needs of students who have a full-time work schedule, and many of them rush to attend classes after work one or two days a week. There are also some weekend classes. The small area, the concentrated population and the good public transport, make part-time face-to-face study the preferred mode in Hong Kong.

Sample

Interviews with twenty-one part-time TPg students were conducted. The students came from seven programmes that were offered by six institutions in Hong Kong (see Table 1.2). Some of them enrolled in taught master's programmes and others studied for the Postgraduate Diploma in Education (PGDE). Although the number of interviewees from each programme is unequal, the diversity of programmes and institutions means that the sample can be considered reasonably representative of TPg students, especially since many of the issues influencing their motivation were related to their maturity, part-time status and employment, rather than to disciplinary considerations.

Table 1.2 Details of interviewees from TPg programmes

University	Programme	No. of students	Abbreviation
U1	MA in Linguistics	4	LIN
U2	MA in Applied Linguistics	1	AL
U3	MA in Teaching Chinese as the Second Language	2	CH
U4	MSc in Information Engineering	4	IE
U5	Master of Business Administration (MBA)	3	MBA
U6	PGDE in Liberal Studies	4	LS
	PGDE in English Language	3	EN

MA: Master of Arts; MSc: Master of Science; PGDE: Postgraduate Diploma in Education

In the Hong Kong context, undergraduate degree holders can be appointed as school teachers even if they do not possess teaching qualifications. However, they are required to obtain such qualifications by participating in part-time postgraduate diploma programmes immediately after they start teaching in schools. Therefore, the informants from the postgraduate diploma programmes in this study were all in-service teachers.

The codes at the end of quotations from TPg students indicate the identity of the interviewees. The codes are in two parts: the first part identifies the programme by using the abbreviation in the final column of Table 1.2, the second part is a numerical code to distinguish interviewed students.

Further information about the study of the TPg students can be found in Ho et al. (2012).

Interviews

Nature of Interviews

To permit an open exploration, from the student perspective, data were gathered through semi-structured interviews. Questions were kept open so as allow interviewees to focus on what seemed important to them. There was no pre-determined framework and care was taken not to lead students towards discussing motivation in terms of established constructs. Prompting and probing questions were used to seek greater depth on topics raised by interviewees.

All interviews were conducted individually. Apart from a small number of interviews with the TPg students, all interviews were in Cantonese. Full transcripts were produced for each interview by translating the taped interviews into English.

Interviewees in each of the three groups were asked, through semi-structured interviews, about the following main areas.

- What motivated them to enrol in higher education?
- What were the reasons behind their choice of the course?
- Why they were interested in studying it?
- What did they expect to experience and acquire through higher education?
- What motivated them to study?
- How the curriculum and teaching and learning strategies motivated them?

These main areas were covered in each of the three studies. There are differences in application for the three groups to suit the nature of the students and the types of programme. More specific information about the interviews for each of the three student groups is given below.

Undergraduates

Interviews were conducted individually. All interviews were with students in the final year of their three year undergraduate degree, so that they could look back across each year of the degree.

For the first part of the interview, the students were asked why they wanted to go to university and why they picked their programme of study. For the second part of the interview the questions were about the motivational impact of teaching and learning. Semi-structured questions were used to ask the interviewees to describe typical approaches to teaching used in their programme, the types of assignments they were set and learning activities they engaged in. They were also asked how these affected their motivation. Sample interview questions for this part of the interview are as follows.

- How would you describe your experience of higher education?
- Were there any critical incidents which happened during your study in higher education?
- How is your course structured?
- What are the best/worst features of the course you take?
- What are the forms/methods of teaching adopted in your course?
- What are the forms/methods of assessment adopted in your course?
- How would you describe your relationship with the teaching staff?
- How would you describe your relationship with your peers?

The sample was restricted to nine programmes, as four students from each programme were interviewed. This meant that an insightful view of each programme could be obtained. It also meant that it was possible to obtain some degree of verification of the interviewees' accounts by cross-comparison of the four interviews for each programme. In each case the level of consistency was quite high. The students had reasonably common perceptions of the prevailing teaching and learning environment in their programmes.

Selecting four students from a programme meant that it was possible to build up case studies of teaching and learning in the selected departments. For the purpose of illumination five representative cases were selected. They are used to provides a more comprehensive picture of motivation by showing how aspects of motivation interact for individual students. The five cases are:

Business	BUSS01
Chemistry	CHEM03
Communication	COMM01
Engineering	ENG01
Social Work	SW04

Community College Students

Interviewees participated in two interviews. The first one was conducted shortly after enrolment and the second in the final year of study. The first interview aimed to understand students' initial motive for enrolling in the programmes and the orientation towards study. The second interview was used to investigate how the initial motivation had been influenced by aspects of the curriculum, teaching, assessment, classmates, the ethos of the institution, and the prevailing teaching and learning environment. Sample questions are given below. Follow-up questions were raised on the basis of the answers received from the interviewees to ensure that every aspect had been fully explored.

Initial Interview

Why did you decide to continue with your studies?
What were the reasons behind your choice of the programme?
Were you good at (related subject) at school?

Second Interview

To what extent does your experience match your expectations?
What are the factors that promote or hinder your achieving of the expectations?
Do you find the programme interesting?
How do you compare your motivation before and after you enrolled in the programme?
Do you think you are good at (the subject)?
Are you confident with your studies?
Do you need any support for your study?

The two part interview format was used as, during the planning process, contacts in the community colleges had informed us that the motivation of their students often changed quite markedly between enrolment and the latter parts of their course. The community colleges and associate degrees were quite new at the time; so expectations at the time of enrolment could be quite unrealistic. The enrollees were also unsure what it would be like to study at the community colleges.

TPg

A single interview was conducted with the TPg students near the end of their programme of study. They were readily able to recall their reasons for enrolment

and any significant changes while they studied. Also, all the students were part-time. Expecting them to spare the time for more than one interview would have been unrealistic.

The interviews were semi-structured, and guiding questions were designed to lead to the research topics. Follow-up questions were derived from the answers by the interviewees. The students were mature professionals, usually studying a course related to their work. Those who were interviewed gave full and frank answers. In most cases a few initial questions were sufficient to start an involved discussion. Initial questions were similar to the following

- Why did you decide to return to study?
- How did you select the current programme and subject?
- What did you expect to experience and acquire from your study?
- How has the curriculum and the approach to teaching and learning affected your motivation?

Analysis

Nearly all the interviews were conducted in Cantonese. Full transcripts were produced for each interview by translating the taped interviews into English.

The first parts of the data to be collected and analysed were that of the undergraduate students and their motivation for study. The initial approach was inductive, principally based upon grounded theory (Glaser and Strauss 1967; Lincoln and Guba 1985). The aim was to characterize motives in a manner compatible with the data, with theory being derived from the data. I went through the transcripts to search for common themes relating to motivation for study. The analysis also employed the constant comparative method (Straus and Corbin 1990), in which parts of an interview are constantly examined in respect to the whole. This was to ensure that descriptors of motive categories were consistent with the whole sense of an interview.

Two other researchers then verified that the thematic categories were consistent with both the sense of the interviews and the orientation categories and proceeded to systematically code the transcripts with NVivo (NVivo 8 2007). During this process the category system was refined through discussion between the researchers. The second level of analysis was a search for more detailed themes or sub-categories. Relationships between the initial codes were examined, which was facilitated by re-ordering coded parts of the transcript, according to categories, with NVivo. Again there was verification of the refined coding scheme between researchers. The final level of the analysis occurred during the writing process.

In the subsequent analysis for other aspects of motivation and other groups of students the analysis inevitably took on a somewhat more deductive approach as the framework guided the analysis. In the second part of the analysis conducted, on motivation for enrolment of undergraduate students, I examined the set of

transcripts for common themes relating to descriptions of initial motivation by going through the transcripts and noting common themes with marginal notes. Initially this was done in an open way, without trying to force the categories towards the continua of the orientation framework; though no doubt these would have had some influence upon the analysis. It was found, though, that emerging themes did fit comfortably into the pre-determined orientation categories.

The quotes for each of the categories and sub-categories were systematically organized with NVivo. The constant comparative method (Straus and Corbin 1990) was applied to ensure that the categories were consistent with the essence of an interview and the coding of each category was congruous across cases.

Once this had been completed it was then possible to sort the transcripts according to the main identified themes. This made it possible to examine each of the main themes for sub-categories. Once identified these were also coded with NVivo to produce a hierarchical coding structure. This facilitated the identification of quotations typical of the themes and sub-themes. The final level of analysis occurred during the writing.

Typical quotations are given to illustrate the main conclusions in the text. The source of the quotations is indicated by the abbreviation in brackets at the end of the quotation, as explained in the sections above.

References

Education and Manpower Bureau. (2001). *Learning for life: Learning through life*. Hong Kong: Education and Manpower Bureau.

Eisner, E. W. (1991). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. New York: Macmillan Publishing.

Glaser, B. G., & Straus, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.

Ho, A., Kember, D., & Hong, C. (2012). What motivates an ever increasing number of students to enroll in part-time taught postgraduate awards? *Studies in Continuing Education, 34*(3), 319–338.

Kember, D. (2007). *Reconsidering open and distance learning in the developing world: Meeting students' learning needs*. Abingdon, Oxfordshire: Routledge.

Kember, D. (2010). Opening up the road to nowhere: Problems with the path to mass higher education in Hong Kong. *Higher Education, 59*(2), 167–179.

Kember, D., Ho, A., & Hong, C. (2008a). The importance of relevance in motivating student learning. *Active Learning in Higher Education, 9*(3), 249–263.

Kember, D., Hong, C., & Ho, A. (2008b). Characterising the motivational orientation of students in higher education: A naturalistic study in three Hong Kong universities. *British Journal of Educational Psychology, 78*, 313–329.

Kember, D., Ho, A., & Hong, C. (2009). Characterising a teaching and learning environment capable of motivating student learning. *Learning Environments Research, 13*(1), 43–57.

Kember, D., Ho, A., & Hong, C. (2010). Initial motivational orientation of students enrolling in undergraduate degrees. *Studies in Higher Education, 35*(3), 263–276.

Kember, D., Hong, C., Ho, A., & Ho, A. (2011). More can mean less motivation: Applying a motivational orientation framework to the expanded entry into higher education in Hong Kong. *Studies in Higher Education, 36*(2), 209–225.

Lee, W. O. (1996). The cultural context for Chinese learners: Conceptions of learning in the Confucian tradition. In D. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 25–41). Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage.

NVivo qualitative data analysis programme (Version 8) [Computer software]. (2007). Melbourne, Australia: QSR International Pty Limited.

Straus, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Chapter 2
Motivation Framework

The method for analyzing the interviews has been explained in the previous chapter. The first set of interviews examined were those of the undergraduate students. The first parts fully analysed were those related to the students' motivation to study. As this was the initial part of the analysis, the approach was inductive, with an exploratory perspective, in an effort to derive grounded theory in a formulation consistent with the expressed views on motivation.

This analysis revealed six major and distinct themes referring to aspects of motivation. Several or all of these aspects of motivation were commonly referred to by individual interviewees. It was, therefore, clear that these should be interpreted as compatible facets or aspects of motivation, rather than alternative types or forms of motivation.

A construct which seemed to be useful in tying together the outcomes of the analysis was that of an 'orientation', which Taylor et al. (1981) used to describe the aims, expectations and attitudes with which students embark on a new course of study. The authors described the concept as:

> By orientation we mean all those attitudes and aims that express the student's individual relationship with a course and the University. It is the collection of purposes which orientates the student to a course in a particular way. Orientation, unlike the concept of motivation, does not assume any psychological trait or state belonging to the student. It is a quality of the relationship between student and course rather than a quality inherent in the student. (p. 3)

In each of these respects the construct of an orientation matched the initial reading of the analysed data. Taylor et al. used the concept of an orientation to categorise the motivations which led to students choosing to enrol in United Kingdom Open University courses. The classifications they derived were vocational, academic, personal and social orientations, with sub-components of; interest, aim and concerns. Our studies showed more and different facets and it was parsimonious to have six elements rather than orientations and sub-components.

Another aspect which was consistent with our work was that Taylor et al. had set out to identify and classify orientations rather than to type students. This was compatible with our finding that motivation was influenced by the context, rather than a reasonably stable attribute.

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The analysis of the data had revealed six facets of a motivational orientation. An adequate representation of motivation, therefore, needed to allow for multiple motivating forces capable of acting in concert. A representation which was consistent with the data was a set of six continua or spectra, each representing a motivational factor. This visualisation would represent students holding varying degrees of multiple facets of motivation. Motivation was, therefore, a complex construct with multiple facets. The complex nature was further heightened by the possibility of students holding multiple goals or primary and secondary motivations. The concept of an orientation was applied through the degree, rather than just for enrolment. This was compatible with findings that motivation was influenced by the context, rather than a reasonably stable attribute. This implied representation of the facets of the orientation as continua and changes in motivation as the degree progressed as shifts along the continua.

The motivational orientation framework is shown in Fig. 2.1. The orientation framework has six motivational facets. Each is represented as a continuum from a low to a high motivational pole, consistent with motivation being contextually dependent. There was evidence of motivation, and particularly the interest and career facets being influenced by the teaching and learning environment, rather than an intrinsic quality of the student. In the interviews students commonly talked of their level of motivation varying as they proceeded through their degree. For example, first year courses concentrating on basic theory could be quite tedious, particularly if the relevance of content was not made clear. Whereas final year options or projects were often found more interesting. Changes in the level of motivation during a degree would be consistent with shifts along one or more of the continua.

There was evidence of mutual reinforcement between the continua, which are represented in Fig. 2.1 by the vertical double headed arrows between continua. High levels on some of the continua might affect perceptions of another; so the student adopts a higher position on the continuum than they might otherwise have done. Conversely, students with low positions on several facets might feel sufficiently de-motivated that they adopt a negative perception towards other facets.

The positive poles of the six continua are given labels: individual goal setting, university lifestyle, sense of belonging, interest, career and compliance. The continua represent elements of motivation; so collectively can be used as a model for a multi-faceted portrayal of motivation. The framework can also be used as a representation of the motivation of individual students at a point in time. A student will have a position on each continua which will shift according to prevailing circumstances and the nature of teaching and learning.

The nature of each of the facets is examined in detail in the following chapters. They are introduced briefly here to give an idea of the formulation and scope of the motivational orientation framework.

The co-existence of the interest and career facets, as positive poles of the framework is quite different to the common formulation of extrinsic motivation as either dichotomous from or a detractor from intrinsic interest. The inclusion of both continua reflects evidence of career prospects being a positive motivator, which

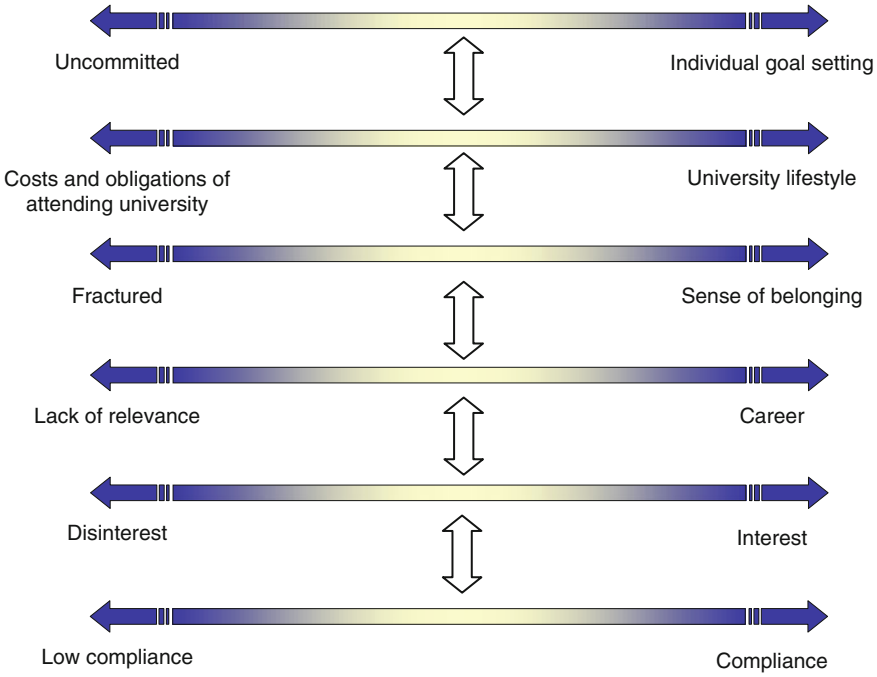

Fig. 2.1 The motivational orientation framework

commonly co-existed with expressions of interest. In well designed courses the two facets clearly acted as mutual reinforcers.

The inclusion of both the individual goal and sense of belonging facets in the framework was consistent with students having personal targets and benefiting from a social form of motivation when there were strong interpersonal links between students in a class. The inclusion of both facets resolves a division in the literature between achievement motive as an individual or social drive. Our data suggested that students possessed individual goals as well as enjoying the benefits of social forms of motivation if a sense of belonging was established. The interviews with most of the undergraduate students suggested that the individual goals were set against grades or degree classes, rather than being competitive.

Compliance arises because students become conditioned to doing assignments and set study tasks. Each student has a level up to which set work will be completed without question. Levels of compliance appeared to be influenced by long term positions on the facets of the framework through unconscious conditioning.

That teaching was influenced by the teaching and learning environment means that our findings were consistent with social-cognitive models of motivation, which stress the changeable and contextual nature of motivation (Pintrich and Schunk 2002). Another aspect of the findings which could be interpreted in line with

social-cognitive theory was the multi-faceted nature of motivation (Pintrich 2003). The theory recognises that students normally have multiple goals, which may be related in a complex manner.

Preview

The next chapter relates the motivational orientation framework to other theories of motivation. The framework will be used to interpret data from the three types of student on motivations to enrol (Chap. 4). It will then (Chap. 5) provide a framework for motivation to study, which will characterise in detail the six facets of motivation in the framework.

The framework is then used to interpret systemic issues from the expansion of higher education in Hong Kong (Chap. 8). Finally cultural issues come under the lens, particularly in relationship to differences in motivation and study approaches between East Asian and Western students (Chap. 9). There is clearly a major advantage to having a holistic framework which can be used to examine, interpret and predict wide-ranging aspects of motivation and applicable to all the main groups of students in higher education.

References

Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*(4), 667–686.

Pintrich, P., & Schunk, D. (2002). *Motivation in education*. Upper Saddle River, NJ: Prentice-Hall Merrill.

Taylor, L., Morgan, A., & Gibbs, G. (1981). The "orientation" of open university foundation students to their studies. *Teaching at a Distance, 20*, 3–12.

Chapter 3
Relationship to Other Theories of Motivation

Introduction

This chapter takes the motivational orientation framework, introduced in the previous chapter, and relates it to theories or models of motivation in the literature. It starts by looking at work relevant to the nature of the framework as a whole. Then it reviews theories relevant to the six facets of the framework.

Overall Motivational Orientation Framework

The framework is consistent with social-cognitive models of motivation (Pintrich 2003; Pintrich and Schunk 2002) in that motivation is represented as a multi-faceted phenomenon which is dynamic and influenced by the context. The nature of teaching, curriculum design and teacher-student and student–student relationships plays a part in the degree and nature of motivation. Positions on each of the continua change over time and could differ between courses or subjects.

Pintrich (2003) presents five general socio-cognitive principles of what motivates students. These five principles of motivation are:

- adaptive self-efficacy and competence beliefs
- adaptive attributions and control beliefs
- higher levels of interest and intrinsic motivation
- higher levels of achievement values
- achievement goals which motivate and direct.

There is some overlap between Pintrich's five principles and the six facets of the motivational framework developed in this book. There are also some quite different constructs in the two models. This is hardly surprising since Pintrich's work is based on the Information Processing school, in which models are derived in a

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top-down manner from psychological constructs in cognitive and educational psychology theories. My approach, by contrast, followed the Student Approaches to Learning (SAL) tradition which develops models from a bottom-up approach from interviews with students about their motivation and learning processes in tackling assignments which they had been set.

What is common to the two models is that both represent motivation as including multiple factors or multiple forms of motivation. Both are also contextual or relational, in that motivation is influenced by the student's perception of the task which has been set and the prevailing teaching and learning environment. Both are also dynamic because they posit that motivation changes over time because of these contextual influences. Both, therefore, reject the notion that motivation is a characteristic of the student or is a stable cognitive style.

Pintrich (2004) went on to develop his model into a conceptual framework for self-regulated learning. The framework included four phases of planning, monitoring, control and regulation. The planning phase includes goal setting. Monitoring is through the cognitive or metacognitive processes associated with the task. The control phase involves selecting strategies for managing and engaging with the task. The regulation phase is a reflective one.

Extrinsic and Intrinsic Motivation

The career and interest facets of the motivational orientation framework need to be related to the literature on extrinsic and intrinsic motivation. This discussion of intrinsic and extrinsic motivation is extensive, as this has almost certainly been the most common way of formulating a description of motivation in higher education. The formulation has been in use for a long time. I have found references to intrinsic and extrinsic motivation dating back to 1960 and there may well be earlier use of the terms.

The definitions of intrinsic and extrinsic motivation can be taken literally from the terms. Intrinsic motivation is normally interpreted as motivation through an interest in the learning task undertaken. Extrinsic motivation, by contrast, is seen as motivation through rewards or factors external to the task. In higher education the external rewards most commonly cited are: the degree obtained, the job it can lead to, or the salary which results from it.

Intrinsic motivation is seen as a positive or desirable form of motivation. Extrinsic motivation is normally seen as a less desirable or weaker form of motivation. In both the literature and common usage the two forms of motivation are normally seen as alternatives or competing forms. Although, as will be discussed later, for such well established constructs there is a surprising degree of conflict in the literature over the relationship between intrinsic and extrinsic motivation.

Motivation Component of Approaches to Learning

A construct which has been widely investigated and utilised in higher education, which incorporates motivation, is approaches to learning. The formulation of approaches to learning as deep and surface approaches (Marton and Säljö 1976) has had a profound impact within higher education as a conceptual framework to underpin quality enhancement strategies. Biggs (1987) has described an approach to learning as having a strategy and a motive component. Intrinsic motivation is the motive component of a deep approach and extrinsic motivation corresponds to a surface approach.

Biggs (1987, p. 15) believes extrinsic motivation is displayed when a student 'sees the task as a demand to be met, a necessary imposition if some other goal is to be reached (a qualification for instance)', whereas intrinsic motivation occurs when the student 'is interested in the academic task and derives enjoyment from carrying it out'. As Biggs notes, these formulations are polar opposites, which has probably been the predominant interpretation of the relationship between intrinsic and extrinsic motivation in higher education.

Scales for both intrinsic and extrinsic motivation were included in the original version of the Study Process Questionnaire (SPQ, Biggs 1987) and the Approaches to Studying Inventory (ASI, Entwistle and Ramsden 1983; Ramsden and Entwistle 1981). Higher order factor analysis of the ASI and the SPQ has consistently found the extrinsic and intrinsic motivation scales appearing in discrete factors. This observation is confirmed by a review by Richardson (1994) and by analysis of multiple samples from diverse sources using structural equation modelling (Kember and Leung 1998; Wong et al. 1996). This means that, as operationalised in the instruments, intrinsic and extrinsic motivation are orthogonal. The student approaches to learning literature, in general, suggests that the two are orthogonal.

While students may have a preferred or most commonly used approach to learning, the approaches are also envisaged as having a strong relational nature (Ramsden 1987) because they are influenced by students' perceptions of the learning context and the task which has been set. The relational nature of approaches to learning has normally been discussed in terms of the overall approach. For the purpose of this chapter, though, it makes sense to consider the motive component.

For the motive component of a deep approach, it is straightforward to see how it is consistent with the relational nature of approaches to learning. If lecturers set tasks which students perceive as novel, exciting or interesting and relevant to the students' needs and expectations, intrinsic motivation is likely to be employed. The less interesting and relevant the task is perceived to be, the lower the level of intrinsic motivation.

However, it is less easy to envisage extrinsic motivation as a relational construct. Nowadays most students have to pay significant tuition fees, often having to take out a loan or building up a sizeable future tax burden to do so. Enrolling in a course with no regard at all to future employment seems both unwise and unlikely.

Nevertheless, prospective students presumably still take interest into account when choosing their degree and hope that the topics taught will be of interest to them.

This suggests intuitively that extrinsic motivation is likely to be reasonably consistent rather than relational. There also seems to be little reason for it to be inconsistent with also displaying intrinsic interest. This definitely seemed to be an avenue to explore further by both examining the literature and empirically through the data gathered in the three projects.

Relationship Between Extrinsic and Intrinsic Motivation

There is an extensive literature on extrinsic motivation, its inter-relationship with intrinsic motivation and their effect on learning. For constructs which have been around for a long time and seem to be so well accepted, the literature is surprisingly contested. The most contentious issue is the relationship between intrinsic and extrinsic motivation; in particular the effect upon intrinsic motivation if extrinsic motivation is also operative.

Many writers have argued that any form of extrinsic motivation will decrease or even destroy intrinsic motivation (e.g. Bruner 1962; Neill 1960; Montessori 1967). The types of extrinsic motivation typically referred to are well illustrated by a quotation from Holt (1964, p. 168).

> We destroy the… love of learning… in children by encouraging and compelling them to work for petty and contemptible rewards — gold stars, or papers marked 100 and tacked to the wall, or A's on report cards, or honor rolls or dean's lists or Phi Beta Kappa keys.

Those who argued for the negative effect of extrinsic motivators preferred to stress ways of stimulating intrinsic motivation. A wide variety of approaches have been advocated including open classrooms (Solomon and Kendall 1976), enhancing self-concept (de Charms 1968) and greater variety in learning activities (Brophy 1986). It is noticeable that the very large majority of the literature refers to school education, often with quite young children.

Others have argued that the relationship between extrinsic and intrinsic motivation is more complex. Most of the literature has reported the results of experiments which have compared the outcomes of tests between unrewarded control groups and experimental groups who were rewarded in some way. The nature of the reward was one of the variables in the design with the main categories being verbal praise or some form of tangible, though token, reward. The experimental nature of the research meant that the learning tasks could normally be completed in the reasonably short period of time allotted to typical experiments.

There have been a series of reviews and meta-analyses of the many experiments of this type to attempt to answer the question of whether intrinsic motivation is diminished by the manifestation of extrinsic motivation. Morgan's (1984) review concluded that intrinsic motivation was undiminished or promoted by conditions such as praise, positive associations, freedom of choice and rewards associated with

competent performance. Conditions such as unpleasant associations, punishment, close supervision or unnecessary rewards were more likely to diminish intrinsic motivation.

A meta-analysis by Cameron and Pierce (1994) concluded overall that any effect of rewards decreasing intrinsic motivation was minimal. A subsequent issue of the same journal, though, contained no less than three rejoinders (Kohn 1996; Lepper et al. 1996; Ryan and Deci 1996) and a rebuttal (Cameron and Pierce 1996). Both the conclusion and the methodology of the original review was questioned.

Deci et al. (1999, 2001) then produced their own meta-analysis which they claimed provided support for cognitive evaluation theory. This asserts that it is the perception of the subject which is important in determining whether intrinsic motivation is depressed (Deci and Ryan 1985). It depends whether the extrinsic factor is perceived as providing information or feedback, in which case intrinsic motivation can increase through an increased perception of self-determination or competence. Factors which are perceived as controlling are usually instrumental in nature and decrease intrinsic motivation by changing the perceived locus of causality (Deci 1972, p. 118). de Charms (1968) found that whether people were self-determining was a major factor in levels of intrinsic motivation. Self-determining people or 'origins' were easier to motivate than 'pawns' who were not self-determining.

Once again the review was accompanied by a rejoinder Cameron (2001) and a rebuttal (Deci et al. 2001b). Cameron (2001) claimed that Deci et al. (2001a) had organised their analysis according to cognitive evaluation theory; so had selectively omitted certain studies and collapsed across distinct types of reward procedures. She pointed out that yet another meta-analysis by her group (Cameron et al. 2001) found that any negative effects of extrinsic rewards on intrinsic motivation were limited and constrained to specific circumstances.

Despite extrinsic and intrinsic motivation having been so widely referred to in the literature for so long, there is still no consensus as to whether extrinsic motivation undermines intrinsic. Drawing conclusions from this contested literature to apply to higher education is not helped by the fact that the large majority of studies examined in this series of reviews refer to short-term laboratory experiments, under different conditions of no-payment, payment, praise etc., which typically observe subjects performing limited tasks, such as puzzles. The majority of the experiments had children as subjects and token rewards. To what extent token rewards can be extrapolated to career expectations and short-term experiments to prospects several years hence is uncertain.

It is also unclear whether cognitive evaluation theory can be used to determine whether university students are likely to perceive career expectations as informational or controlling. The most relevant work on this aspect seems to be that on internalised motivation. Stipek (1988) describes internalised motivation as occurring when children, and presumably older students, learn that certain behaviours are valued in a society. These values are eventually adopted and behaviour becomes consistent with the values.

Those who reach this state of internalising the belief have been described as self-regulated by Ryan et al. (1985). They act in a way which is consistent with the belief of their own volition. The example given by Stipek (1988, p. 45) is of children internalising an academic work ethic after social reinforcement from parents and others that schoolwork is valued. If children internalise this belief they then work hard of their own volition because they feel proud of their efforts.

As the belief or values have been internalised, motivation through this channel does not lead to a diminution of any existing intrinsic interest in the task. It is interesting to note the analysis of a questionnaire by Harter (1981), which examined intrinsic and extrinsic poles of a number of dimensions. Factor analysis clearly separated the dimensions into a motivational cluster and a cognitive informational one. The latter factor encompassed dimensions of self-reliance and internalisation of goal setting.

The relevant question then is whether university students would have internalised a value for well-paid or high-status careers? Generalisation of a conclusion would seem dangerous. The influences of society, context and families would appear to be varied, as would individual beliefs. If it is possible to draw any conclusion from the literature, it is perhaps that the relationship between extrinsic and intrinsic motivation is contested.

Research into Extrinsic and Intrinsic Motivation in Higher Education

One of the reasons for my interest in conducting a study of the nature of motivation in higher education was two of my projects prior to those discussed in this book which appeared to cast doubt on the prevailing interpretation of extrinsic and intrinsic motivation in higher education. The first was a study by Kember et al. (1999) which found that about 40 % of an extensive series of Hong Kong interviewees showed evidence of both intrinsic and career motivation. The students were asked open questions about curriculum issues, rather than questions about motivation, let alone specific questions about types of motivation. It is likely that the 40 % is an under-estimate of the proportion of students who would feel that a course should both stimulate intrinsic interest and benefit their career. The transcripts showed no evidence of incompatibility between intrinsic interest and the extrinsic motivation related to a future career.

A further study of part-time university students (Kember et al. 2001) examined their motivational orientation to enrolment. Just about all of the 53 interviewees showed evidence of some form of vocational orientation. These were in most cases in combination with other orientations, including one classified as learning for pleasure through the lifetime.

Evidence from the Undergraduate Sample

These results, which seemed to question the most prominent theory of motivation in higher education, prompted the series of three studies which looked directly at motivation. When the data collection from the undergraduate sample—the first set of data to be collected—was complete, an analysis was conducted to examine parts of the data which related to either intrinsic or extrinsic motivation.

A thematic analysis suggested that these parts of the data could be coded under two main categories labelled *interest* and *career*, each with a set of sub-categories. The coding had categories with labels *interest* and *discipline interest*, both with positive and negative sub-categories. These categories were clearly related to classical intrinsic interest. These coding categories and sub-categories will be referred to collectively as the *interest* grouping. Other main categories with labels *financial, career, job*, and *programme I could get into* were related to extrinsic forms of motivation. This collective set of codings and sub-categories will be referred to as the *career* set.

NVivo (2007) made it possible to identify interviewees with codings in the interest and career sets. Every single one of the 36 interviewees had at least one coding in the career set. There were 28 students with one or more coding from the interest set, so all but eight students were coded for both interest and career. These coding figures could well be underestimates as the coding of transcripts focussed on identifying common themes of significance to the research topic. Reasonably substantial parts of most interviews were, therefore, left uncoded. It is also possible that students could have shown a form of motivation without mentioning it in the interview. Avoidance of leading in interviews can result in themes not being uncovered.

These results certainly cast doubt on the characterisation of intrinsic and extrinsic motivation as orthogonal. The finding that all of the interviewees made some mention of career, job or financial considerations also calls into question the notion of these as extrinsic forms of motivation with negative connotations. Surely, the entire group of interviewees could not have entered university and worked through to their final year with negative goals and minimal aspirations, particularly since this was a high achieving group in an elite university system.

Cases Illustrating Combinations of Interest and Career Motivation

To illustrate the various forms of combination of interest and career motivation five mini-cases will be given. These have been selected so as to be typical of the observations expressed on this topic. They come from five different disciplines, which is reasonable as each of the nine programmes in the sample had at least two interviewees with codings in the career and interest sets. The cases also illustrate a variety of ways in which the combinations occur.

The first case is of a Communication student who expressed an interest in the work and output of reporters. This led on to being motivated to choose reporting as a future career. There was also a classic expression of intrinsic interest, that motivation was enhanced if a subject was enjoyed. There was also recognition that having a degree was likely to enhance the chances of promotion and increase job opportunities.

> I like reading newspapers and am impressed by the writings of reporters. They have a broad mind that they can see something other people can't see. That's what I find interesting.
>
> My motivation will be higher if I can take some subjects that I like.
>
> Practically, higher qualifications will offer me better chances in job seeking. I think it is easier to get a high paid job or with better career prospect.
>
> I am really impressed by the observation or intelligence of reporters. I am eager to share with others my experiences and what I see. Therefore, I would like to be a reporter as my future career.
>
> Even if we have to start from a lower rank, I think a university graduate is more likely to be promoted than others. Furthermore, we may be capable of doing some professional tasks not open to those with lower qualifications. (COMM03)

The second mini-case is of a Mechanical Engineering student who expressed curiosity and interest in learning about things in general. Yet a degree was seen as the minimum passport to obtain a job. The range of topics covered in the degree were seen as providing a wide range of career openings with the anticipation of the potential need to shift career tracks in the future.

> I am interested in learning different kinds of things. I am fond of learning. To dig deep in an aspect, it takes time and I think I'll do that for great interest. As I am willing to learn, I am curious about new things. I think this helps me a lot in my learning.
>
> It seems to me that having a degree is just meeting the minimum requirement for a job. As a result, I would like to go to university.
>
> Perhaps, this would give me a broader range of choices for my future career. After taking this programme, I have learned many different subjects such as Logistics, Management, Computing and many other subjects. Although I am working on the industrial profession now, I think it is not a big problem for me to change my working field in the future. As I have got all the basic knowledge, it is quicker for me to get into another field. (MENG03)

Four of the five cases are from professional programmes. This proportion is seen as reasonable, since these days the large majority of students enrol for professional degrees. Even though the numbers entering higher education have expanded markedly, pure subjects have often struggled to recruit students. This observation in itself would seem to be evidence of the importance to potential students of the likelihood of their degree leading to suitable employment.

The next student is from Chemistry, which nowadays is normally regarded as a pure subject. The student said that being interested in a subject was important for study. There seemed to be acceptance that the subject was a pure one and that much of what was learnt will not be applied. Nevertheless, there was recognition that a

degree is needed as a passport for a job and that the need to seek employment is a motivating force.

> To me, I can do well and be happy only when I am interested in that subject.
>
> I study according to my own interest. The things that I have studied may be useless at the end but I think learning more is better than less, for I have not lost anything.
>
> If you are to find a job in the future, if you're not a university graduate, it will be very difficult for you to land up with a job.
>
> I'm now in my final year, my motivation is great for it is time for me to seek a job. (CHEM02)

The next case is of an Occupational Therapy student. The importance of interest was in this case demonstrated in a negative sense. The student chose not to take subjects studied at school because the interest in these subjects had been extinguished. It appears that schools in Hong Kong are not good at maintaining interest in topics studied in secondary school as similar comments were common. Instead an interest in helping others in need was a motivator for enrolment.

Like many other interviewees, a degree was seen as a pre-requisite for obtaining acceptable employment. There are a limited range of types of employment open to those whose education is limited to the school level, but a wider range of options with better salaries for those with a degree. There was concern, though, in this case that the number of Occupational Therapy students exceeded the number of available posts in the field.

> I dare not take any subjects which were closely related to what I took at F.6 - F.7 [the two senior years of secondary school]. I didn't like to take Chinese or History. They are boring subjects. As I was an Arts student who took Human Biology, this made it possible for me to take OT. Thus, I would like to take something more interesting to me. This is my first choice! I like OT because it really can help other people in need. Besides, it is more interesting than those arts subjects. We need not sit in the classroom all the time.
>
> Difficult to get a job. This is the main concern of OT students. At present, there are some vacancies but there insufficient posts for all of us. I may not recommend to my friends, but I will tell them the advantages of this course.
>
> Why I decided to go to university … Because I think I have more freedom in my choices of future career. I didn't know what I can do if I was just a F.7 graduate. (OT04)

The final case is a Pharmacy student who became interested in the subject because of being cured of asthma by medication. The interest in the subject was sufficient to motivate the student for the tedious rote learning required by some of the courses in the programme. This is an interesting observation as intrinsic interest is normally associated with a deep approach. The motivation for studying Pharmacy though was not just out of interest. The student was well aware of the high starting salaries of Pharmacists and the general benefits for employment of possessing a degree.

> When I was very young, I had asthma. Not till I was 12 or 13 was I finally cured by a doctor. At that time, I inhaled medicine and I found it very miraculous. There was a few times when I couldn't breathe, had to rush into the hospital, nearly died. I found that the

> medicine that I was inhaling was very miraculous, and it was from that time on that I wanted to know more about it.
>
> One needs to be highly interested in pharmacy in order to study it. If you're not interested, you can't rote learn a thing, you don't have the heart to memorize anything.
>
> Actually the economic status is rather good for a pharmacist, for it has a stable income of high salary, which is one of my reasons for choosing pharmacy.
>
> Yes, good for my career path and also employers are apt to look at your educational level nowadays. (PHAR02)

The mini-cases show a variety of ways in which interest combines with career motivation. The latter is an extrinsic form of motivation, but is not at all well represented by the normal negative visualisation of it. The career motivation displayed in the mini-cases is clearly capable of being a highly positive motivating force, rather than having the purely negative connotation of the definition of extrinsic motivation.

The mini-cases are incompatible with the formulation of intrinsic and extrinsic motivation as orthogonal. Nor are they consistent with the claims that the presence of extrinsic motivators tend to depress intrinsic motivation, or at best leave it undiminished. The cases clearly show interest co-existing in harmony with career motivation. The first two and the last of the cases show a distinct mutual reinforcement between interest and career motivation. This effect could not be ruled out in the other two cases either.

Career

The review of the literature on extrinsic and intrinsic motivation has showed that the literature on the relationship between the two is contested. Interpretation of the body of work for the purpose of this book is often problematic because much of it has been derived from short term experiments with young children being given token rewards; which is a very different scenario to that of higher education, considered here.

Considerable doubt on the portrayal of extrinsic motivation as a negative force, incompatible with intrinsic motivation, was cast by the studies reported in the previous main section. Rather, motivation associated with a future career seemed to be a positive force which could co-exist with intrinsic motivation, and the five cases suggested there could be mutual reinforcement. As a result of these findings, the motivational framework did not include a facet resembling extrinsic motivation, but instead has a facet labelled career, which has a positive pole like other facets. All facets of the framework are envisaged as acting in concert; so interest and career aspirations are not only compatible, they are able to reinforce each other.

The career facet of the framework is more consistent with the vocational orientation of Beaty et al. (2005), which they described as having intrinsic and extrinsic sub-components. The inclusion of both career and interest continua in the

framework is based on evidence of career prospects being a positive motivator, which commonly co-existed or was mutually reinforced by interest in the subject.

In view of the earlier discussion of the motivation component of approaches to learning, it is instructive to note that in when John Biggs re-formulated the SPQ as the revised SPQ (Biggs et al. 2001), there are still strategy and motive components. The motive component of a deep approach is still consistent with intrinsic motivation. The motive component of a surface approach, though, has changed considerably. It is now characteristic of students doing the minimal amount of work possible to get by.

Interest

The co-existence of the interest and career facets, as positive poles of the framework is quite different to the common formulation of extrinsic motivation as either dichotomous with or a detractor from intrinsic interest. The difference in the framework, though lies in the replacement of extrinsic motivation with the career facet, which can be a powerful motivating force.

The interest facet is reasonably consistent with classic formulations of intrinsic motivation as showing interest in the subject studied. It is perhaps somewhat broader as, in professional courses, establishing the relevance of concepts and theories to the profession was shown to be a powerful motivating force. The interest facet can, therefore, take on a longer term connotation than the way intrinsic motivation is often envisaged as relating to particular tasks which have been set.

The interest facet, therefore, equates well to interpretations of approaches to learning as having both a preferred or commonly used approach as well as a relational aspect (Ramsden 1987) which is a response to the student's perception of the particular academic task. Students will start their degree with an interest level at a particular position on the interest facet continuum, determined by their level of interest in the subject area or professional discipline they have chosen. This position represents the longer term aspect of the interest facet. In addition, there will be a shorter term relational aspect which will depend on the student's perception of the particular subjects they are enrolled in or the assignments they have been set.

Individual Goal Setting

The individual goal is a target, normally expressed as a grade or GPA, which the students set themselves. Earlier goal theorists contrasted mastery and performance goals (e.g. Ames 1992), the major distinction being that mastery is a self-referenced goal of achieving competence, whereas performance goals compare performance with other students, so are essentially competitive. More recent work (e.g. Elliot and McGregor 2001) has added approach and avoidance foci as an additional

dimension to the performance and mastery goals; so forming a four category classification system.

Performance Goals

The undergraduate sample showed relatively little sign of competition. This may have been influenced by the social nature of achieving motivation in traditional Confucian-heritage societies (Hsu 1981; Yang and Yu 1988; Yu 1996, 1974). However, the community college students recognised that places at UGC-funded universities would go to a small proportion at the top of class. The goal of gaining a place at university outweighed societal influences; so there was more evidence of competition than among the undergraduates.

> We did not have a good relationship among peers in the AD programme. It is because all of us are fighting for a seat to go to the university. Competition is drastic and I hated such hatred feeling. I am glad that I can release from such hard feeling when I study here. (CCD02)

Fear of Failure

More recent goal theories (Elliot and McGregor 2001) have turned goal taxonomies into four category schemes by adding approach and avoidance categories. The approach category implies motivation to directly try to attain the goal, whereas avoidance means motivation through apprehension of not attaining it. The most common manifestation of avoidance goals in students is fear of failure.

The undergraduate students showed no signs of avoidance goals. They had successfully come through a selective education system, in which progress is largely dependent on examination results. A long history of academic success would have left them confident of meeting goals rather than having a fear of failing to meet them.

Whereas in the community college sample the avoidance goal of fear of failure was quite common. At the start they seemed to be optimistic. The realisation that there were few transfer places in UGC-funded institutions started to turn approach into avoidance goals. These avoidance goals were reinforced as assignments were graded and courses completed and the students began to realise that their initial optimism was unfounded.

> But I am not confident that I can enter university. I am a bit worried about it. For the translation programme, we have to do well in every subject. I have heard that the requirement for translation programme at university is 3.5 for GPA. That's why I am worried about it. (CCA01)

Sense of Belonging

The inclusion of both the individual goal and sense of belonging facets in the framework is consistent with students having personal targets and benefiting from a social form of motivation when there were strong interpersonal links between students in a class. The inclusion of both facets resolves a division in the literature between achievement motive as an individual or social drive. Western definitions have seen it as individual and competitive (e.g. Biggs 1987), whereas in other cultures, such as the Chinese, there is more of a social or family dimension (Hau and Ho 2010; Hsu 1981; Yang and Yu 1988; Yu 1996, 1974). Data from the three samples suggested that students possessed individual goals as well as enjoying the benefits of social forms of motivation if a sense of belonging to a class or cohort was established.

Biggs (1987, p. 11) follows standard Western psychology textbooks by defining achieving motive as:

> Achieving Motive is based on competition and ego-enhancement: obtain highest grades, whether or not material is interesting.

The individual and competitive nature inherent in this definition has been questioned by Kember (2000), particularly for students in Confucian-heritage countries. Salili (1996) reviewed the literature on achievement motivation among Chinese students and noted the cultural impact of a strong sense of collectivism manifest in loyalty to the family and other social groups.

In a study of Chinese high school students, Yu (1974) found that Western measures of achievement motivation were not appropriate as they characterised the motivation as individual. Hsu (1981) compared Americans and Chinese, and argued that the motivating force for the latter came primarily from the family and the clan. Yang and Yu (1988) argued that Chinese achievement motivation featured socially approved goals.

Yu (1996) compared the Western traditional individual-oriented achievement motivation (IOAM) with social-oriented achievement motivation (SOAM) which gave a better representation to the traditional Chinese form of motivation. In SOAM the goal is set by others rather than by the individual. The action necessary to achieve the goal and the evaluation of its attainment were also determined by others. The psychology of the Chinese people is well developed compared to other non-Western cultures (Bond 1996, 2010), but other cultures, such as those in the Pacific Islands, also show evidence of SOAM rather than IOAM (Mugler and Landbeck 1997, 2000).

Hofstede (1980) examined work-related values in 40 countries by analysing IBM personnel surveys. The work has since been updated and analysed in greater detail (Hofstede 2001). The dimension which is relevant here is individualism. Hofstede (2001, p. 215) has a table of individualism index values for 50 countries and three regions. The top four ranked countries were predominantly-English speaking countries; USA, Australia, UK and Canada. It is significant that a

substantial proportion of the higher education literature has emanated from these countries, which are classified as highly individualist. Triandis et al. (1993) examined collectivism-individualism in ten countries at the individual level. Again there was a tendency for Westerners to be higher on individualism.

Effect of Education Systems on Achievement Motivation

The attributions of IOAM in the West and SOAM in the East are associated with very traditional influences. In the Chinese psychology literature, SOAM is explained as having a number of influences, most derived from the Confucian tradition (Hau and Ho 2010; Hsu 1981; Yang and Yu 1988; Yu 1996, 1974). Western competitive drive is most commonly associated with a protestant work ethic.

It is instructive to consider to what extent these traditions may have been modified by the prevalent situation in higher education in the East and West—a discussion which will be continued in Chap. 9. I will contrast Hong Kong, where the data for this book were collected, with Australia, where I now live and work. In terms of the level of competition within the educational systems, I suggest these places can be considered representative of East and West.

Chapters 1 and 8 indicate that Hong Kong has a two tier higher education system, of which the much preferred higher tier is elitist. There is, therefore, intense competition to obtain places at the UGC-funded universities. This competition is manifest throughout the selective school system, as it is performance at the external school-level examinations which determines which schools students are admitted to and eventually decides university entry. The pressure even starts at kindergarten, since the most highly regarded primary schools select students based on kindergarten performance.

Australia, by contrast, has achieved mass higher education. Relatively low tertiary entrance scores can be sufficient to gain entry to some courses at some universities. Competition at schools is, therefore, considerably less than in Hong Kong and is further damped down by the pervasive policy of inclusiveness, which is discussed in Chap. 9.

The degree of selectivity in the two education systems results in motivational forces which are in opposite directions to the traditional influences posited by IOAM or SOAM. The Confucian heritage in Hong Kong points towards societal achievement motivation, yet the degree of selectivity results in intense individual competition. The traditional portrayal of achievement motivation in Australia is that of an individual competitive drive, however, the expanded entry to higher education has reduced the need for competition, so the Australian tradition of mateship has a chance to flourish.

The motivational orientation framework copes well with these dichotomies by the inclusion of both individual goal setting and sense of belonging facets, and portraying both as continua from positive to negative poles. The framework is,

therefore, able to capture the tension in both East and West between traditional motivational forces and the pressures from the current status of the educational systems. The dynamic interacting tensions faced by students in both East and West is portrayed well by the characterization of the framework as including multiple facets of motivation, which interact with each other in a dynamic way over time.

First Year Experience Literature

A body of literature which would appear to be relevant to the sense of belonging facet of the framework is that which goes under the banner of 'the first year experience'. This deals with the assimilation of students into the university community. The predominant original influence on the research into the first year experience is that of Tinto's work on student drop-out from US colleges (Tinto 1975, 1987). Following the work of Spady (1970, 1971), Tinto (1975, 1987) compared dropping out to suicide; so drew upon Durkheim's (1961) theory of suicide to explain attrition. Durkheim noted that egotistical suicide could occur if individuals became isolated from society's communities because of an inability to integrate and establish membership. Tinto (1987) also drew on the work of Van Gannep (1960) on rites of passage as an analogy to making the transition from membership of school social circles to university communities.

The first year experience programs which followed were introduced to reduce drop-out, which was a major problem for US colleges, particularly in first-year. They concentrated on social assimilation into college society. This means that the first year experience literature must be re-focused if it is to be appropriate for consideration alongside a model of motivation.

Tinto's model of assimilation into college incorporated two forms of integration; academic and social. Social integration is manifest as a student being incorporated into one or more groups within the college community, thus developing a sense of becoming part of university society. Academic integration requires students to adopt study behaviours consistent with the norms of universities. The academic affiliation part of Tinto's model corresponds with the normative congruence or value integration part of Durkheim's theory of suicide. In academic terms integration occurs when students hold beliefs consistent with the demands of higher education and follow academic conventions in their work.

While there is commonly an interplay between the two forms of integration, social integration is more relevant to the university lifestyle facet of the framework and, therefore, will be dealt with in the next main section. Academic integration has a major influence on the degree of affiliation within class cohorts, which the three studies showed to be the most significant manifestation of the sense of belonging facet.

Integration into Effective Learning Communities

If academic assimilation succeeds, students will be integrated into learning communities, which Smith and Bath (2006) defined as the 'social, interactive and collaborative character of the student experience of university life' (p. 275). To re-focus the first year experience literature, integration can be envisaged as a two phase process. The first phase is the social assimilation into one or more communities to a sufficient extent that they feel integrated into university society. The second phase considers the extent to which these communities promote effective learning outcomes and enable students to achieve academic congruence.

The nature of the collaboration and the type of communal learning activities engaged in affect the outcomes of the collaboration. Yan (2001) conducted 57 individual and 15 focus group interviews with Hong Kong students to investigate out-of-class learning activities performed by groups of students of their own volition. Yan and Kember (2004a) reported that collaborative activities could be placed on a spectrum from low to high task involvement. Yan and Kember (2004b) showed that the types of activities could be classified into engager or avoider approaches, which were parallel to the individual deep and surface learning approaches. Engager approaches were focused on collaboration to gain a better understanding of a concept, while avoider approaches were adopted to minimise the work of individuals in a group.

Yan and Kember (2003, 2005) showed the nature of the teaching and learning environment strongly influenced both the degree of collaborative learning and whether engager or avoider approaches were adopted. Creating an appropriate teaching and learning environment promoted out-of-class relationships and encouraged the deployment of engager approaches, which resulted in students helping each other to understand key concepts and hence to achieving high quality learning outcomes. Teaching approaches and curriculum development can, therefore, play an important role in developing effective learning communities.

Of first-year experience work which has looked more at academic transition and integration, there are indications that students had particular difficulties when there were mis-matches between their perceptions of academic expectations and actual requirements. Krause (2001) found that, in their first written assignment, it was common for students to have difficulty conceptualizing their audience and its demands (McInnis et al. 2000) noted that early assignment grades often came as a reality shock because students were unclear about the academic expectations of university. Brownlee, Walker, Lennox, Exley and Pearce (2009) argued that personal epistemological beliefs related closely to beliefs about learning, so influenced chances of adapting to university during their first year of study.

University Lifestyle

As has been noted above, Tinto's model (Tinto 1975, 1987) of retention included an element of social integration. Social integration would seem to be an academic construct related to the university lifestyle facet. Students are most likely to feel a sense of enjoyment about their university lifestyle if they feel that they have established membership of one or more friendship groups within the university.

Assimilation into college society was found to be an important determinant as to whether students persisted with their studies. Assimilation was envisaged in research studies as student-student and student-tutor interactions. In practical terms the model has served as the foundation for the widely pursued programmes to enrich the first year experience and provide students with a collegial environment conducive to social interaction and integration.

There is, then, interaction between the sense of belonging and university lifestyle facets. In terms of learning communities, students need to become incorporated into broadly-based first-phase social communities as well as second-phase academic learning communities appropriate for their discipline. There is likely to be overlap and some commonality of membership between the types of community. It also has to be accepted that communities are likely to be dynamic in membership as students shift between courses. The characteristics of communities could also mutate as priorities shift as students progress through their degree.

Social affiliation is a pre-requisite for the formation of learning communities, but there is certainly no guarantee that assimilation will automatically result in effective learning communities. Indeed, social affiliation often results in less learning activity, as attention is diverted from academic tasks to social activities.

Compliance

Compliance arises because students become accustomed to doing assignments and set study tasks. Each student has a level up to which set work will be completed without question. It is not easy to find literature relating directly to compliance. This is possibly because most models of motivation propose a model based around a single concept and it is not easy to envisage compliance as the only motivational force in operation.

It could be considered that operant conditioning (Skinner 1953, 1968) is related. Pressure of teachers and parents to condition children to do homework might be likened to operant conditioning. However, by the time students reach higher education, it is highly questionable whether this is a relevant model.

It seems more appropriate to consider compliance as the unconscious manifestation of the other facets of the framework. The other facets, apart perhaps from interest, are relatively long term considerations which might be quite stable for periods as long as a semester or year. Career aspirations may not change much

during a degree; just being heightened as completion approaches and job prospects loom. Goals may shift somewhat when feedback arrives in the form of grades awarded at the end of a semester, but should then settle back down to a stable position.

Study and academic tasks, though, operate on a much shorter timeframe—they have to be completed every day. Students do not re-appraise their goals or career aspiration each time they set out on an assignment. Rather, this is where compliance comes in. It is the long term habitual manifestation of the combination of the other facets.

Conclusion

The motivational orientation framework which thematically ties together the whole book is unusual for models of motivation in that it was derived using a grounded theory approach (Glaser and Strauss 1967; Strauss and Corbin 1990) from open interviews with students about the way they tackled academic tasks and their perceptions of the teaching and learning environment they normally experienced. The framework was, therefore, derived in an inductive manner from naturalistic research (Lincoln and Guba 1985).

The chapter has shown, though, that within the large body of motivational literature there are elements of writing which relate to both the overall framework and to the individual facets. This is of significance because much of the motivation literature was developed top–down from theory.

References

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261–271.

Beaty, L., Gibbs, G., & Morgan, A. (2005). Learning orientations and study contracts. In F. Marton, D. Hounsell, & N. Entwistle (Eds.), *The Experience of learning: Implications for teaching and studying in higher education* (3rd (Internet) ed., pp. 72–86). Edinburgh: University of Edinburgh, Centre for Teaching, Learning and Assessment.

Biggs, J. (1987). *Student approaches to learning and studying*. Melbourne: Australian Council for Educational Research.

Biggs, J., Kember, D., & Leung, D. Y. P. (2001). The revised two factor study process questionnaire: R-SPQ-2F. *British Journal of Educational Psychology, 71*, 133–149.

Bond, M. H. (Ed.). (1996). *The handbook of Chinese Psychology*. Oxford: Oxford University Press.

Bond, M. H. (Ed.). (2010). *The Oxford handbook of Chinese psychology*. Oxford: Oxford University Press.

Brophy, J. (1986). Socializing student motivation to learn. Institute for Research on Teaching, Research Series No. 169. Michigan State University, East Lansing, Michigan.

Brownlee, J., Walker, S., Lennox, S., Exley, B., & Pearce, S. (2009). The first year university experience: using personal epistemology to understand effective learning and teaching in higher education. *Higher Education, 58*, 599–618.

Bruner, J. S. (1962). *On knowing: Essays for the left hand*. Cambridge, MA: Harvard University Press.

Cameron, J. (2001). Negative effects of reward on intrinsic motivation—A limited phenomenon: Comment on Deci, Koestner, and Ryan (2001). *Review of Educational Research, 71*, 29–42.

Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward and intrinsic motivation: A meta-analysis. *Review of Educational Research, 64*, 363–423.

Cameron, J., & Pierce, W. D. (1996). The debate about rewards and intrinsic motivation: Protests and accusations do not alter the results. *Review of Educational Research, 66*(1), 39–51.

Cameron, J., Banco, K. M., & Pierce, W. D. (2001). Pervasive negative effects of rewards on intrinsic motivation: The myth continues. *The Behavior Analyst, 24*, 1–44.

de Charms, R. (1968). *Personal causation: The internal affective determinants of behaviour*. New York: Academic Press.

Deci, E. L. (1972). Intrinsic motivation, extrinsic reinforcement, and inequity. *Journal of Personality and Social Psychology, 22*(1), 113–120.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York and London: Plenum Press.

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin, 125*, 627–668.

Deci, E. L., Koestner, R., & Ryan, R. M. (2001a). Extrinsic rewards and intrinsic motivation in education: Reconsidered once again. *Review of Educational Research, 71*, 1–27.

Deci, E. L., Ryan, R. M., & Koestner, R. (2001b). The pervasive negative effects of rewards on intrinsic motivation: Response to Cameron (2001). *Review of Educational Research, 71*, 43–51.

Durkheim, E. (1961). *Suicide* (Spaulding, J. & Simpson, G. trans.) Glencoe: The Free Press.

Elliot, A., & McGregor, H. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology, 80*, 501–519.

Entwistle, N. J., & Ramsden, P. (1983). *Understanding student learning*. London: Croom Helm.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.

Harter, S. (1981). A new self-report scale of intrinsic versus extrinsic orientation in the classroom: Motivational and informational components. *Developmental Psychology, 17*, 300–312.

Hau, K. T., & Ho, I. T. (2010). Chinese students' motivation and achievement. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology*. Oxford: Oxford University Press.

Hofstede, G. H. (1980). *Culture's consequences: International differences in work-related values*. Beverley Hills: Sage.

Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks: Sage.

Holt, J. (1964). *How children fail*. New York: Dell.

Hsu, F. L. K. (1981). *Americans and Chinese: Passage to differences* (3rd ed.). Honolulu: University of Hawaii Press.

Kember, D. (2000). Misconceptions about the learning approaches, motivation and study practices of Asian students. *Higher Education, 40*(1), 99–121.

Kember, D., & Leung, D. Y. P. (1998). The dimensionality of approaches to learning: An investigation with confirmatory factor analysis on the structure of the SPQ and LPQ. *British Journal of Educational Psychology, 68*, 395–407.

Kember, D., Wong, A., & Leung, D. Y. P. (1999). Reconsidering the dimensions of approaches to learning. *British Journal of Educational Psychology, 69*, 323–343.

Kember, D., Armour, R., Jenkins, W., Lee, K., Leung, D. Y. P., Li, N., et al. (2001). Orientations to enrolment of part-time students: A classification system based upon their perceived lifelong learning needs. *Higher Education Research and Development, 20*(3), 265–280.

Kohn, A. (1996). By all available means: Cameron and Pierce's defence of extrinsic motivators. *Review of Educational Research, 66*(1), 1–4.

Krause, K. L. (2001). The university essay writing experience: A pathway for academic integration during transition. *Higher Education Research and Development, 20*(2), 147–168.
Lepper, M. R., Keavney, M., & Drake, M. (1996). Intrinsic motivation and extrinsic rewards: A commentary on Cameron and Pierce's meta-analysis. *Review of Educational Research, 66*(1), 5–32.
Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
Marton, F., & Säljö, R. (1976). On qualitative differences in learning, outcome and process I. *British Journal of Educational Psychology, 46*, 4–11.
McInnis, C., James, R., & Hartley, R. (2000). *Trends in the first year experience*. Canberra: Australian Government Printing Service.
Montessori, M. (1967). *The discovery of the child*. New York: Ballantine Books.
Morgan, M. (1984). Reward-induced decrements and inducements in intrinsic motivation. *Devices of Educational Research, 54*, 83–99.
Mugler, F., & Landbeck, R. (1997). Learning in the south pacific and phenomenography across cultures. *Higher Education Research and Development, 16*(2), 227–239.
Mugler, F., & Landbeck, R. (2000). Learning, memorisation and understanding among distance learners in the south pacific. *Learning and Instruction, 10*(2), 179–202.
Neill, A. S. (1960). *Summerhill: A radical approach to child rearing*. New York: Hart.
NVivo qualitative data analysis program (Version 8) [Computer software]. (2007). Melbourne, Australia: QSR International.
Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*(4), 667–686.
Pintrich, P. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review, 16*(4), 385–407.
Pintrich, P., & Schunk, D. (2002). *Motivation in education*. Upper Saddle River: Prentice-Hall Merrill.
Ramsden, P. (1987). Improving teaching and learning in higher education: The case for a relational perspective. *Studies in Higher Education, 12*(3), 275–286.
Ramsden, P., & Entwistle, N. J. (1981). Effects of academic departments on students' approaches to studying. *British Journal of Educational Psychology, 51*, 368–383.
Richardson, J. T. E. (1994). Cultural specificity of approaches to studying in higher education: A literature survey. *Higher Education, 27*, 449–468.
Ryan, R. M., & Deci, E. L. (1996). When paradigms clash: Comments upon Cameron and Pierce's claim that rewards do not undermine intrinsic motivation. *Review of Educational Research, 66* (1), 33–38.
Ryan, R., Connell, J., & Deci, E. (1985). A motivational analysis of self-determination and self-regulation. In C. Ames & R. Ames (Eds.), *Research on motivation in education* (Vol. 12, pp. 13–51)., The Classroom New York: Academic Press.
Salili, F. (1996). Accepting personal responsibility for learning. In D. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences*. Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.
Skinner, B. F. (1953). *Science and human behavior*. New York: Macmillan.
Skinner, B. F. (1968). *The technology of teaching*. New York: Appleton-Century-Crofts.
Smith, C., & Bath, D. (2006). The role of the learning community in the development of discipline knowledge and graduate outcomes. *Higher Education, 51*, 259–286.
Solomon, D., & Kendall, A. J. (1976). Individual characteristics and children's performance in open and traditional classroom settings. *Journal of Educational Psychology, 68*, 613–625.
Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange, 1*, 64–85.
Spady, W. (1971). Dropouts from higher education: Toward an empirical model. *Interchange, 2*, 38–62.
Stipek, D. J. (1988). *Motivation to learn: From theory to practice*. Boston: Allyn and Bacon.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Tinto, V. (1975). Drop-out from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89–125.

Tinto, V. (1987). *Leaving college*. Chicago: University of Chicago Press.

Triandis, H. C., McCusker, C., Betancourt, H., Leung, K., Salazar, J. M., Setiadi, B., et al. (1993). An etic-emic analysis of individualism and collectivism. *Journal of Cross-Cultural Psychology, 24*, 366–383.

Van Gannep (1960) The rites of passage. (M. B. Vizedom and G. L. Coffee, Trans.). Chicago: University of Chicago Press.

Wong, N. Y., Lin, W. Y., & Watkins, D. (1996). Cross-cultural validation of models of approaches to learning: An application of confirmatory factor analysis. *Educational Psychology, 16*, 317–327.

Yan, L. W. F. (2001). *Learning out of the classroom: The influence of peer group work on learning outcome*. Unpublished Ph.D. thesis, the Hong Kong Polytechnic University.

Yan, L., & Kember, D. (2003). The influence of the curriculum and learning environment on the learning approaches of groups of students outside the classroom. *Learning Environments Research, 6*, 285–307.

Yan, L., & Kember, D. (2004a). Avoider and engager approaches by out-of-class groups: The group equivalent to individual learning approaches. *Learning and Instruction, 14*(1), 27–49.

Yan, L., & Kember, D. (2004b). Engager and avoider behavior in types of activities performed by out-of-class learning groups. *Higher Education, 48*, 419–438.

Yan, L., & Kember, D. (2005). Contextual influences on the formation and behaviour of out-of-class study groups. *Curriculum and Teaching, 20*(2), 59–79.

Yang, K. S., & Yu, A. B. (1988). Social- and individual-oriented achievement motivation: Conceptualization and measurement. Paper presented at the Symposium on Chinese Personality and Social Psychology, 24th International Congress of Psychology, Sydney.

Yu, E. S. H. (1974). *Achievement motive, familism and hsiao: A replication of McClelland-Winterbottom studies*. Unpublished doctoral dissertation. University of Notre Dame.

Yu, A. B. (1996). Ultimate life concerns, self, and Chinese achievement motivation. In M. H. Bond (Ed.), *The handbook of Chinese psychology*. Oxford: Oxford University Press.

Chapter 4
Motivation to Enrol

This chapter present evidence from the three studies explaining how decisions about enrolment can be interpreted in terms of the facets of the conceptual framework.

Governments in developed countries have been keen to boost the overall intake to university education. Developed countries need to become knowledge-based economies if they are to maintain their prosperity in the face of outsourcing and the migration of basic manufacturing to less-developed countries with cheaper labour. Knowledge-based societies need a well-educated workforce equipped with graduate attributes such as creative and critical thinking, problem-solving, communication skills and the ability to work in teams.

It would, therefore, be useful to have a good understanding of what motivates students to decide that they wish to apply to become a university student and obtain a degree. This could be expected to relate to motivation for their study prior to university and also during their degree. The nature of their motivation and degree of determination to enter university will affect their commitment to study prior to university. The form of motivation to enrol for a degree and the intensity of it will influence their dedication and approach to study when they become a university student.

If students are sufficiently motivated to enrol for a degree, a related motivational issue becomes that of what they choose to study. This is an issue with considerable implications as funding for universities and the departments within them depends upon the number of students they are able to attract. The influence of market forces is such that it is commonplace for unpopular subjects to be discontinued. Some factors, such as career prospects and family influences, may be difficult for departments to influence. Many governments attempt to influence programme choice as they need to ensure that there are sufficient graduates in a field to meet national needs.

Again this aspect of motivation has long term implications. The choice of subjects studied at school and the degree of enjoyment of studying them affects the choice of university degree. The reciprocal relationship can also be of relevance as if students have an intended university programme in mind there are normally implications for what they need to do prior to university.

Given the significance of what motivates students to go to university and choose a particular degree to enrol in, there is eminent justification in utilising a coherent framework to explain these motivational decisions. To be useful, such a framework

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should not be confined to motivation for enrolment, but should also extend to motivation for study before and after enrolment. Attitudes to studying prior and subsequent to the decision to enter university will be implicitly related to the motivation for doing so. A comprehensive framework capable of explaining motivations for both enrolment and study would, therefore, be more valuable.

Motivation to Enrol and Choose a Subject

In the remainder of the chapter, the facets of the motivational orientation framework are examined in turn to see how they can be used to interpret decisions on enrolling at university. Two forms of motivation are examined; firstly, the decision to go to university, and secondly, what to study.

The chapter and the facets of the orientation model have been ordered in terms of addressing the motivation issues; firstly, the decision to go to university and secondly, what to study. The first three elements of the orientation model refer mainly to the decision as to whether or not to apply for admission to or enrol at a university. The sense of belonging and career facets affect both the decision to go to university and which programme to pick. The interest continuum has a distinct influence on which degree to choose.

Compliance

Undergraduates

For characterizing initial motivation, compliance is an unquestioning attitude that going to university was a natural step. The students in this sample were full-time undergraduates in what is an elite university system in that only about 17 % of an age group are able to gain a place in one of the universities funded by the University Grants Council of Hong Kong (UGC) (University Grants Council of Hong Kong 2006). Most would have had a long history of success during their school education. They would have had an expectation that their examination results would be good enough to obtain a place at university.

> At that time, I didn't set any goal. I just wanted to go to university and I didn't know why. (COMM01)

> It is obvious that you will go to university if you pass the A-level. (MENG02)

Some also had an unquestioning attitude to study in general. Once one level was completed it was natural to go on to the next.

> Why … I think this is a norm of our society, it is almost a must for you to keep on studying, progressing forward; the more you study, the better. (PHAR03)

Community College Students

There are strong pressures on Hong Kong students to study from parents, teachers and fellow students (Kember 2009; Kember and Watkins 2010). The limited number of places in senior secondary school and the UGC-funded universities mean that the examinations which determine the award of places take on vital importance. Performance at junior school and even kindergarten can affect the chances of entry to the better schools, which are more successful in helping students to progress to the next level. Pressure to study, therefore, often starts at an early age.

> Every time when I failed my exams, they would pressurise me; such as stop giving me pocket money, prohibit all of my hobbies. They would urge me to go to the library, study room or to stay home and study. (CCB02)

The traditional respect for education in Confucian-heritage societies magnifies the pressure to perform well (Lee 1996). It also means that little thought is given to not proceeding to post-secondary education. Even though the interviewees had not been able to gain a place at a UGC-funded university, or in some cases senior secondary school, their families supported their enrolment in a community college. Investment in education is second nature in Confucian-heritage societies.

> Besides my mother and aunties, my cousins also supported us. They gave us all their savings of Hong Kong dollars. (CCA04)

> My dad knew that I wanted to enrol in the Pre-AD programme, even though the tuition was expensive, he still supported my decision. He knew that if I liked the programme, I would be able to study happily in here, should end up having better academic results, therefore he supported my decision. (CCB01)

Taught Postgraduates

An interesting phenomenon with the TPg students was the number of 'perpetual students' as they were christened. No sooner did they finish one degree than they would enroll in another. Some of them had obtained more than one bachelors degree, while others were pursuing a second masters degree. Others had participated in short courses as well as degree programmes. Some students joined more than one programme simultaneously. They seem to enjoy the accomplishment of studying and some of them had become habitual learners. They literally seemed to have taken on board the mantle of life-long learning.

> I have been engaging in continuous studies. It is about 8 years in total. … I have got a degree in Engineering and then I took another Language and Translation degree programme offered by [university]. … I like learning as this is my character. … I have established a habit of learning continuously. … Studying… I think it is useful. It is helpful and I think I have got a sense of satisfaction. This sense of satisfaction originates from the accomplishment of something such as I did not waste my time. (MBA03)

Individual Goal Setting

Undergraduates

For initial motivation, going to university was itself a goal. In many cases it had clearly been a long term goal.

> I was longing for university life. I wanted to experience it in person so as to see the differences between secondary school and university lifestyle. Personally, I think it is good to spend as much time as possible studying. Life is long and studying is just a small part in our life. (MENG04)

The goal setting was particularly notable among some of the weaker students who did not obtain sufficiently high grades to gain a place at university the first time they sat their A-level examinations. Some students held strongly enough to the goal of going to university that they repeated the final year of secondary school to obtain a place. In doing so they selected university programmes with lower entry standards in order to gain entry.

> Why do I want to go to university? It is the trend in Hong Kong society that students had better to go to university. I have taken A-level two times in order to go to university. I only succeeded the second time. (MENG04)

More detailed goals expressed a rationale for going to university in terms of personal development. These were often statements about the development of generic capabilities. Students felt that entering university would deepen their knowledge and sharpen their intellectual higher-order thinking ability.

> As I am not good at thinking, I would like to get some training here to make some improvements. It is important to be flexible and quick in response when you work. (MATHS01)

Community College Students

Less Realistic Long Term Goals

The longer term goals of the community college students were the same as those of the undergraduate sample; they were virtually unanimous in wanting an undergraduate place in the UGC-funded universities. Both higher diplomas and associate degrees are arranged in vocational streams. However, none of the interviewees seemed to envisage them as terminal awards. There is also little sign of employers seeing associate degree graduates as desirable employees. Instead taking an associate degree was seen as a second chance of achieving the goal of getting into an undergraduate degree. The population does not accept associate degrees in

community colleges as a legitimate part of higher education of the same standing as undergraduate degrees in UGC-funded universities.

> Going to university. That is the best way for me. (CCA03)

> Getting a higher diploma is not an end to me. We are aiming for going to university. (CCA04)

The problem with this goal is that, for the vast majority, the goal is unrealistic. In its plans to revitalise and expand post-secondary education the Government (Education and Manpower Bureau 2001) envisaged articulation and transfer between types of award and within the higher education sector. However, there has only been a limited number of places in universities specifically allocated for associate degree and higher diploma graduates. Openings for undergraduate degrees in the UGC-funded universities have remained at about the same level and, apart from the specific places for associate degree graduates, the large majority of students are still allocated places based on the results of secondary school examinations.

> I chose this AD programme simply because I did not get enough grades for entering into university and I wanted to have a post secondary education for I wanted to equip myself well. I would regard this programme as a stepping stone to enter into university therefore I chose to enrol in this AD programme. (CCB01)

Despite the slim chances of proceeding from community college to a place in an undergraduate degree in a UGC-funded university, on entry to the community college sector the students hold the goal of obtaining one of the few places. Holding this unrealistic goal is particularly surprising in that most of the students had recently completed end of school examinations and been judged not to have performed well enough to progress.

> All the students are focusing on academic results because they are longing to enter university. (CCA01)

Adapting to More Realistic Goals

The result is that the large majority of students were frustrated in their goal of transferring to an undergraduate degree in a UGC-funded university. This can be used to illustrate the dynamic nature of the model. As the students receive grades which are not high enough to put them right at the top of the class, they begin to realise that they are unlikely to achieve their goal of a place in a UGC-funded university.

> I may be not as optimistic as before. I can handle my studies but I realize that the possibility for entering university is lower than I expected. When you first came here, you did not have a clear picture. By now, I discover that the chance for entering university is quite low. That's why I tell you I am not as optimistic as before. (CCA03)

There was evidence of a shift to more realistic goals. Because of the very restricted chances of progressing from an associate degree to a UGC-funded university, the continuing education providers have started offering top-up degrees, often in conjunction with overseas universities. Through these, by two years of full-time study, it is possible to convert an associate degree into an undergraduate degree. The award is from an overseas partner university, which are mostly lowly ranked. Study takes place at the community college campuses, which are lacking in facilities compared to the UGC-funded universities. The teaching is by staff employed by the community colleges. The option is, therefore, seen as inferior to a degree from a local university. However, for most it is a more realistic option; so goals shift.

> They told me no matter what, I had to get into university. I have told them the possibility of being admitted into one of the local universities was extremely low, therefore have to look into foreign universities instead. If I can get a more than 3 point GPA, I think I'm alright, can get into one of the foreign universities. (CCB04)

The common shift in goals, from high but unrealistic goals at the outset, to lower more realistic ones as the realisation that a place at a UGC-funded university was not attainable, is an example of the dynamic nature of the model. This change also provided evidence for the interaction of the facets, indicating that the model is both multifaceted and dynamic, making it consistent with socio-cognitive models of motivation (Pintrich 2003; Pintrich and Schunk 2002). It was noticeable how students changed between first and second interviews. The lowering of the goals also tended to lower other facets. Interest declined and there were more complaints about the limited facilities which dampened the potential impact of the lifestyle facet. This in turn reduced the sense of belonging.

Sense of Belonging

Undergraduates

The sense of belonging facet of the framework refers to the social motivational influence of colleagues. For motivation to enrol at university, this is an important element in the framework as there are social influences from three sources; classmates, teachers and family members, particularly parents. In terms of the decision as to whether to go to university, this was definitely the strongest influence. The choice of programme was also influenced by those whom students were closely affiliated with.

It is possible that these social influences are stronger in Asian countries than in the West. The classic definition of achievement motive in Western psychology texts portrays it as an individual and competitive drive (e.g. Biggs 1987). In Chinese psychology achieving motive has traditionally been characterized as having a social dimension through filial piety (Ho 1996) or obligation to family or society

(Hsu 1981; Yang and Yu, 1988; Yu 1996, 1974). There is a general tendency for Western society to be relatively high on individualism, while developing societies tend to rate higher on collectivism (Hofstede 1980, 2001).

Family

Family influences were of two types. The first was from families in which members had received a university education. When parents and/or siblings were graduates, there was often an expectation of following the same path.

> My parents are longing to see me as a university graduate. It is because both my elder brother and sister are degree holders. (MATHS01)

There were also cases of students being motivated to attend university because there had been no graduates in their family. They felt an obligation to promote the wellbeing, status or morale of their family by entering a level of education higher than older family members.

> The most influential is my family members. As there is no university graduate in my family, they do have some expectations of me. At least, they would expect me to get my degree. (COMM03)

> I decided to go to university as fulfilling my parents hope. They did not receive much education due to their tough life. Therefore, I would like to provide them a better life in future through higher education. (BUSS04)

This latter form of family influence may be culturally specific. In most societies children of families with no history of university education tend to be less likely to enrol at university than those with graduates in the family. It has been a common expectation, though, in Confucian-heritage societies that family members will progress to higher levels of education, generation by generation. This is presumably influenced by traditions of filial piety (Ho 1996) and the levels of collective affiliation in society (Hofstede 1980, 2001; Hsu 1981; Yang and Yu 1988; Yu 1996, 1974).

Student Peers

Students influenced their peers by expressing their own aspirations. The schools in Hong Kong have been banded by ability. Students in elite high band schools are likely to influence each other to see going to university as a norm. This is reinforced by a culture in Hong Kong that education is important; so going to university is the ideal of students. However, in low band schools the prevailing attitude is more likely to discourage aspirations to seek a university education.

> Maybe peer influence exists. It seems that going to university is the ultimate goal of my classmates and me. (BUSS01)

The banding by ability, means that students likely to be able to win a place at university will normally be in a class with others who also have a good chance. The elite schools definitely have high expectations of their students, which would mean that going to university would be a normal progression.

> I think it is the trend. In my secondary school, most of the F.6-7 students [final two years of secondary school] are able to go to university. Thus, it seems quite natural to go to university after the completion of secondary school. (OT03)

> You won't consider not going to university. Actually, the percentage for promoting to university in our school is more than 90 %. (COMM01)

Teachers

Teachers also play a role in encouraging students to aim towards going to university. They want their students to do well in the external examinations and gaining entry to university is one of the principal motivators they can use to encourage students to work hard and study for the examinations. Such exhortations build an impression that going to university is a highly desirable outcome.

> During primary, our school teachers would tell us to study hard in order to get into good secondary schools, then universities, then end up with a good job in the future. During lower secondary, we were told to study hard in order to choose ideal subjects. During HKCEE [examinations at the end of junior secondary], we were told to study hard in order to stay in and progress upward to A level. During A level, there wasn't much to say since it was the time for us to prepare ourselves for entry into universities. Therefore, we were told to study, study and study. Our aim was to study for entry into universities. (CHEM02)

Teachers also influence the students' choice of subject. Our interviews showed that many students knew little about the programme they had chosen or, in the case of professional degrees, the profession it led to, which may well be a common phenomenon for school leavers worldwide. Students, therefore, sought guidance from their teachers.

> I would take advice or suggestions from my secondary school teachers. My teacher also told me that BBA was suitable for me. Almost every teacher told me the same. They all suggested me to take BBA. (BUSS02)

Particular teachers also acted as a role model for students, inspiring them in their choice of university programme. The influence of the teacher often acted in concert with the interest facet as the inspiring teaching resulted in interest in the subject being developed.

> I was influenced by my other teacher, he taught chemistry and he taught it interestingly. (CHEM01)

> I met an excellent mathematics teacher in primary school. This teacher enabled me to develop my interest in mathematics. I am pleased that I also met several good mathematics teachers. They taught very well. I can say that I am interested in mathematics due to the influence of my mathematics teachers. They were teaching me not only mathematics

> knowledge but also many principles on how to behave. I realized the great responsibilities of teachers at that time. (MATHS03)

Taught Postgraduates

The TPg students were all part-time students, mostly studying courses related to their profession. An additional factor consistent with sense of belonging, therefore, came into play. The development of professional networks was another reason for returning to study for some students. This motivating component interacts with career benefits to some extent as the students expect to meet people in the same industry and develop professional networks. In this way, they can exchange information and share their views.

> I expect to get in touch with people working in IT field. … I really want to know more IT people and enrich my knowledge and experience. (IE01)

Other students want to make new friends to expand their social network.

> I expect to expand my social network. In short, I hope that I can make more new friends. (MBA01)

Interest

Undergraduates

For the initial motivation of students, interest was a very important factor affecting their choice of university programmes. Personal interest in a particular discipline or profession will be their reference for enrolment to university programmes. The chemistry student, quoted below, chose to enrol in the subject at university because of an interest at school.

> During HKCEE, I didn't think I would go for chemistry, but when I reached A level and as I studied far more in depth, I really liked chemistry a lot, my brain was full of chemistry, therefore ended up choosing chemistry. (CHEM01)

Motivation towards a particular career also affected students' choice to enrol in a particular university programme. If students have shown interest in a particular industry, they would prefer to enrol in a relevant university programme. This kind of motivation was initiated by career interest. Obviously, this was mainly to be found among students of professional degrees.

> I have been very interested in communication since I was in secondary school. I planned to take communication long time ago… I like reading newspapers and impressed by the

> writings of reporters. They have a broadened mind that they can see something other people can't see. That's what I find it interesting. (COMM03)

The negative side of interest also affected the initial motivation of students in their choice of degree. Disinterest acted like a shield to prevent students from enrolling in a university programme. Disinterest came mostly from the disciplines students were forced to study at secondary school. The choice in the final school years was relatively restricted. All too often schools had had a negative impact, which made students resolve to study something other than the subjects taken at secondary school.

> I dare not take any subjects which are closely related to what I took at F.6 - F.7. I didn't like to take Chinese or History. They are boring subjects. As I was an Arts student who took Human Biology, this made it possible for me to take OT. Thus, I would like to take something more interesting to me. (OT04)

Taught Postgraduates

Most of the TPg students were enrolled in courses relating to their profession. Nevertheless, many cited interest in the subject as an important element of motivation.

> I am interested in this subject. I have been helping with projects which are related to language teaching and learning. Therefore, I wanted to study the subject of linguistics systematically. (LS01)

Some students chose to study in an area which is different from their fields of work, but is commensurate with their interest. The interviewees demonstrated great interest in their subject areas and the learning process.

> I discovered that I already had a comprehensive understanding of the field with more than ten years of work experience in the areas of marketing, business and media. Instead of studying in these areas, I decided to study in an area to help with my personal development and consistent with my interest. … I do not consider qualifications very important. I enjoy the process of learning. (TC01)

Career

Undergraduates

The career facet referred to any motivation related to their future career prospects. Unlike classic definitions of extrinsic motivation, this was not manifest as a negative or weak form of motivation. Nor was it incompatible with interest in a subject. In fact, in many cases, particularly in professional courses, showing relevance to a

future career was a good way to stimulate interest. The career and interest facets often reinforced each other.

Financial

The most common way of expressing financial incentives for enrolling at university was by considering it as a necessary pre-requisite for obtaining a decent job. Without a degree there were few attractive openings with reasonable salary prospects.

> You will never be able to compete with others in this current society if you choose not to enter university. For the sake of your future career, the money you earn, one needs to be a university graduate in order to be considered by your prospective employers. (PHAR01)

While this may be equated to classic extrinsic motivation, it could not reasonably be interpreted as a minimal or negative form of motivation. All 36 of the undergraduate interviewees had one or more comments coded as career or financial. Yet 28 of them also made statements coded in the interest category. It was clear that enrolees wanted both good career prospects and a field of study or professional award which interested them. There were clear cases of the two mutually reinforcing each other.

Career Aspirations

Some went beyond a degree as a pre-requisite for a reasonable career, to allowing career prospects to influence their choice of a degree. The following four quotations are from the interview with one of the pharmacy students. The first two fall under the career facet. The first is of the type illustrated above; that a degree is seen as a pre-requisite to a reasonable career. The second goes further in asserting that pharmacists are paid high and stable salaries. The final two quotations, though, show that the good career prospects were reinforced by an enduring interest in the topic.

> Yes, good for my career path and also employers are apt to look at your educational level nowadays.
>
> …the economic status is rather good for pharmacist, for it has a stable income of salary, which is one of my reasons for choosing pharmacy.
>
> When I was very young, I had asthma. Not till I was 12 or 13 was I finally cured by a doctor. At that time, I inhaled medicine and I found it very miraculous. There was a few times when I couldn't breathe, had to rush into the hospital, nearly died. I found that the medicine that I was inhaling was very miraculous, and it was from that time on that I wanted to know more about it.
>
> One needs to be highly interested in pharmacy in order to study it. If you're not interested, you can't rote learn a thing, you don't have the heart to memorize anything. (PHAR02)

The above set of quotations are clearly incompatible with interpretations of extrinsic motivation which see it as a negative form of motivation which is largely incompatible with intrinsic motivation. There is some debate about the relationship between extrinsic and intrinsic motivation (see Chap. 3), but this is quite a common interpretation. The evidence above is more consistent with the learning orientations formulated by Beaty et al. (2005), who included a vocational orientation with intrinsic and extrinsic sub-categories. The latter was distinguished by students aiming to obtain a qualification which would lead to a job. The intrinsic vocational orientation was defined by students seeking a training which would equip them well for their future careers. This latter formulation is more consistent with the manifestation of career motivation in our interviews.

Community College Students

For the community college students, career motivation was less direct. They wanted to gain entry to an undergraduate degree as that was seen as a qualification which led to a good career.

> It is important to be a university graduate. (CCA04)

Taught Postgraduates

The TPg students were studying part-time. All were working in professional roles and many were taking courses related to their careers. A large part of their answers to questions about their reasons for enrolment, therefore, fitted into the career facet of the framework.

The interview data suggested that TPg students enrolled in their courses for a number of career-related reasons. They intend to fulfill the requirements of the professions, advance their career in current employments, look for opportunities in new fields, increase their competitive capacity in the job market and follow the trend of upgrading skills.

Qualification for Professional Requirements

Undergraduate degree holders who do not have teaching qualifications can secure a teaching position in schools under the condition that they will obtain a Postgraduate Diploma in Education (PGDE) as soon as possible after they become school teachers. In this case, they have no choice but to study for qualifications which are recognized in Hong Kong.

> I have chosen teaching as my career. For my degree course, we have had major courses but also we have to get sufficient credits for education certificate courses. I have got the credits in Taiwan but only degree is recognized in Hong Kong but not my qualification as a teacher. As a result, I have to take a certificate of education in Hong Kong in order to be a qualified teacher. (LS01)

Qualifications for Competitive Capacity

A masters degree may not have been the requirement for the interviewees' current positions, but the students anticipated that it would be so in the future. The students were inspired or pressured to pursue further study by the large number of higher degree holders in the community, and therefore have the urge to increase their competitive capacity, which has become the trend and perhaps a requirement in Hong Kong society. They expect that the qualification will help to secure a stable job as well as to benefit their income.

> I thought that it was important to obtain qualifications. Although I do not need a masters degree for job security at the moment, I am not sure if it will be useful in the future. More and more people are obtaining masters degrees these days. In the past, not many people had a degree and it was also not required for my job. But a degree is required now. I decided to get into the programme partly because a masters degree could be the requirement for jobs in the future. Therefore, I did not want to wait to enter a programme of study when I would need a masters degree to meet job requirements. (LS03)

Qualification inflation has had an impact on the rise in students taking TPg awards. Some interviewees considered the phenomenon particularly acute in Hong Kong.

> At present, possessing a bachelor degree cannot guarantee you a job. It is not an entry ticket but you get a chance to line up. The minimum requirement has been upgraded to a master degree. In the market, it is common to see job advertisements require a master degree. Some of them even ask for possessing a PhD. … Hong Kong has been transformed into a knowledge-based society. If you stop learning, you will be left behind. You cannot pick up with the updated rhythm of life. In Hong Kong, we cannot deny that our life rhythm is much faster than that of other countries. I think our attitudes towards learning are different between the people living in other countries. They are more relaxing but we are learning in a rush so as to get the qualifications. (MBA02)

Career Development for Current Career

Some students considered the qualifications important for helping them advance in their current jobs or gain recognition in seeking other opportunities in the job market. It is obvious that the employers in Hong Kong highly value the qualifications of employees and the reputation of the institutions that the students obtain them from. Otherwise, the students would not consider the qualifications beneficial

for having job opportunities and paying attention to ensuring whether the qualification is recognized by the government and the employers.

> My degree is on Business Administration. Therefore, it makes great sense for me to further my study by taking MBA. I can try different types of job with an MBA degree. (MBA01)

Skills and Knowledge

Apart from obtaining qualifications to gain recognition from the employers, the students realized that they should equip themselves with updated adequate knowledge and master certain skills to become competent members in the professions. Most part-time TPg students are full-time employees. Both newcomers and experienced employees in the professions are well aware of the level and kind of knowledge and techniques that are necessary for them to progress in their current careers. Therefore, the students hope that the postgraduate learning experience will benefit their career development in terms of knowledge and capability.

Most PGDE students are new in the profession and do not have any training in teaching. They hope to acquire subject knowledge as well as learn about teaching methods and classroom management. They are keen to learn pedagogy and classroom management skills because new teachers are anxious about the skills of handling students, maintaining discipline in the classroom, and using effective methods for teaching.

> I expect to learn more about teaching pedagogies and how to handle students effectively. Basically, I am sure I will learn more about Liberal Studies. In the meantime, I really want to learn how to tackle different student problems upon different aspects such as psychologically. I dare to learn something that is beyond the teaching content but how to teach. (LS02)

Keeping Abreast of Developments

Some masters students decided to pursue further study because they have been working in the same job or vocation for many years. They want to enhance their knowledge and desire to be refreshed and kept up-to-date with developments in the subject area. Other students expect to acquire knowledge and skills that are applicable to their work. Therefore, the relevance to their work and the practical nature of the programme become important criteria for the students' decision on specific programmes.

> I need to upgrade and update my IT knowledge. IT is an ever-changing industry or subject matter. I graduated from [university] more than 10 years ago. At that time, I was learning the most updated IT knowledge. But what I had learned is outdated now so it is necessary to keep me refreshing. (IE01)

> This programme is about language studies. I am interested in the topics of language in societies, the methods for helping school students improve their writing skills, new trends

> of curriculum development etc. I expected the programme to benefit my work. I also wanted to improve my language abilities by attending the programme. Moreover, the education system in Hong Kong is undergoing the 3-3-4 reform. Instead of seeing it from the point of view of a school teacher, I wanted to view the change from a different perspective. (AL01)

Potential Future Career

Some students intend to change their fields of work after completion of the programmes. They are mature and experienced in work and do not tend to take the risk of jumping into a brand new area without any understanding of the challenges. They seek to understand their chosen areas by searching for relevant information and consulting people in the professions.

> I would like to learn more and it will equip me better in terms of changing jobs. In fact, I am thinking about changing my working field. (IE01)

The PGDE students hope to cover other subjects in teaching in this sense, while the masters students consider prospects in other areas. The PGDE students believe that subjects that have been recently developed and are currently popular could open up more job opportunities for them and broaden their horizon of knowledge.

> I do not put History my major this time but Liberal Studies. It seems the prevailing trend is to enroll to Liberal Studies as a PGDE major. … I would like to broaden my views by including different perspectives such as the development of IT, environmental issues or else. That's why I prefer Liberal Studies to History in this case. (LS03)

Liberal studies is a new subject being introduced at senior secondary level as part of a major revamp of the Hong Kong education system. The reforms, known as 3-3-4, see secondary education cut from seven to six years, with an extra year added to undergraduate degrees. The systemic change is being accompanied by major curriculum development leading to the need for staff development, which has in itself influenced TPg enrolments.

University Lifestyle

Undergraduates

Universities offer an enjoyable social life as well as providing an education. The social benefits from becoming a university student and adopting a university lifestyle are particularly attractive to those going to university soon after completing secondary school. This was the case for most of the sample in this study.

> Why did you decide to go to university? I want to play. [Laugh] Studying is different from working somehow. I heard from senior students that university life is fascinating and attractive. Inevitably we seem to have to study at university. (BUSS01)

Universities offer a wide range of extra-curricular activities not available to school students or those who enter the workforce.

> Extra-curricular activities. I really enjoy these activities since I was in secondary school. I believe the activities at university are richer than those in secondary school. (BUSS03)

More student hostels have been provided for universities in Hong Kong in recent years as the UGC believes that living in a hostel constitutes an important element of the co-curriculum. For some of the students going to university meant moving out of the family home to live in a hostel. This meant greater opportunities for a social life.

> Besides, I live in the hostel. Thus, I always meet some students in the hostel when using the lift. Then we try to talk with each other. Finally we become close friends. The main reason is that we have got more chances to see each other as […] university is not large. We just have three canteens here. Thus, it is quite easy to meet your classmates or friends here. (COMM01)

The opposite end of the university lifestyle continuum has the label costs and obligations of attending university. These costs were invariably the tuition fees which had to be paid, which in many cases meant a future loan being paid off. Obligations to the family were also common. Many of the students had to take part-time jobs to meet their financial commitments.

> [At school] you needed not to bother about the school fees or paying a credit card bill. However, all these are your own responsibilities now. It is not only that you have expectations on your own but also for your family members too. I have to pay back the government loan for my study over these three years. Besides, I have to share the economic burden of the family. In short, I have to pay back what I have got from my family. (BUSS01)

The cost of going to university can cause most students to question whether it is cost-effective to enrol for a degree and must deter some from doing so. Once the decision has been made and the enrolment fee paid, there is an incentive to study to make sure the investment does not go to waste.

> In terms of money, I pay $42,100. In order to make good use of what I've paid, I have to attend as many lectures as I can, do the best that I can. (CHEM03)

Community College Students

The community college students raised issues about their college lifestyle; in particularly about their disappointment that the colleges' facilities were limited compared to those of the universities. However, they did not seem to have realised this at the time of enrolment, so this is not pertinent to this chapter, and is dealt with in Chap. 8.

Taught Postgraduates

The taught postgraduates were all part-time students with work and family commitments. There was no opportunity for them to enjoy the type of university lifestyle which typical undergraduates enjoy. The time they spent on-campus was restricted to time for classes.

The lifestyle facet, therefore, had to be interpreted in terms of the cost end of the continuum. There was a financial cost as TPg courses are run on a self-financing basis. There was also a considerable lifestyle cost as they had to balance work, family and social commitments against study requirements.

Conclusion

The motivational framework utilised in this book was first developed to characterise and explain motivation for study tasks. In this chapter it has been used to provide an interpretive framework for a body of data about students' motivation for choosing to enrol for a degree and for picking a particular subject. The orientation framework can, therefore, be seen as comprehensive in nature.

The framework consists of six facets. In this chapter compliance was manifest as an unquestioning attitude of students in the elite schools that it is normal to proceed on to university. Presumably, in the lowest band schools, there is the diametrically opposed unquestioning belief that it is normal not to go to university. While some students thought little about whether to go to university, for others there was a strongly expressed personal goal of taking their education as far as they could.

The university lifestyle facet provided a motivation for students to attend university through the social life universities offered. The chance to move out of the family home into a hostel could enhance this expectation. The opposite end of the continuum featured the fees which had to be paid and the financial obligations incurred.

The sense of belonging facet encompassed the social influences on potential students. Family influences occurred when other family members had attended university. There were also cases of students expressing a determination to go to university as their parents had not had the chance to do so, which may be a cultural phenomenon. Students in a school class influenced each other to apply for university and to study hard to gain a place. Teachers influenced potential students both to apply and in the choice of subject.

The career facet had two aspects. It was common to see a degree as a prerequisite to a reasonable career, though this acted as a positive motivator and could not be equated to the negative visualisations of extrinsic motivation. Most students were also guided in their choice of which programme to pick by career prospects and again this was a positive motivational force.

The final facet of interest acted in concert with the career aspect as students expected their degree to lead to a worthwhile career and to interest them too. Interest was a major factor in choosing their subject. Some students chose their field because of positive experiences studying it, or a related subject, at school, while others picked something different as their interest had not been stimulated at school.

The facets in the orientation model have been able to provide an interpretive framework for the gathered data which shows a good fit. It can therefore be concluded that the motivational framework can be applied to the decision to apply to university and to choosing a course.

Each student could have been allocated to a position on each of the continua based on the strength of their commitment to attend university, though the allocation is perhaps not as apparent as it was for motivation to study. That allocation then serves as the initial motivational status for studying at the start of the degree. These positions will then shift in response to perceptions of the context and to personal circumstances.

References

Beaty, L., Gibbs, G., & Morgan, A. (2005). Learning orientations and study contracts. In F. Marton, D. Hounsell, & N. Entwistle (Eds.), *The experience of learning: Implications for teaching and studying in higher education* (3rd (Internet) ed., pp. 72–86). Edinburgh: University of Edinburgh, Centre for Teaching, Learning and Assessment.

Biggs, J. (1987). *Student approaches to learning and studying*. Melbourne: Australian Council for Educational Research.

Education and Manpower Bureau. (2001). *Learning for life: Learning through life*. Hong Kong: Education and Manpower Bureau.

Ho, D. Y. F. (1996). Filial piety and its psychological consequences. In M. H. Bond (Ed.), *The handbook of Chinese psychology*. London: Oxford University Press.

Hofstede, G. H. (1980). *Culture's consequences: International differences in work-related values*. Beverley Hills: Sage.

Hofstede, G. H. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks: Sage.

Hsu, F. L. K. (1981). *Americans and Chinese: Passage to differences* (3rd ed.). Honolulu: University of Hawaii Press.

Kember, D. (2009). International students from Asia. In M. Tight, J. Huisman, K. H. Mok, & C. Morphew (Eds.), *Routledge international handbook of higher education*. Abingdon, Oxfordshire: Routledge.

Kember, D., & Watkins, D. (2010). Approaches to learning and teaching by the Chinese. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology*. Oxford: Oxford University Press.

Lee, W. O. (1996). The cultural context for Chinese learners: Conceptions of learning in the confucian tradition. In D. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences*. Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*(4), 667–686.

Pintrich, P., & Schunk, D. (2002). *Motivation in education*. Upper Saddle River, NJ: Prentice-Hall Merrill.

University Grants Council of Hong Kong. (2006). *Facts and figures 2005*. Hong Kong: University Grants Committee Secretariat. Retrieved from http://www.ugc.edu.hk/english/documents/figures/.

Yang, K. S., & Yu, A. B. (1988). *Social- and individual-oriented achievement motivation: Conceptualization and measurement*. Paper Presented at the Symposium on Chinese Personality and Social Psychology, 24th International Congress of Psychology, Sydney.

Yu, A. B. (1996). Ultimate life concerns, self, and Chinese achievement motivation. In M. H. Bond (Ed.), *The handbook of Chinese psychology*. Oxford: Oxford University Press.

Yu, E. S. H. (1974). *Achievement motive, familism and hsiao: A replication of McClelland-Winterbottom studies*. Unpublished doctoral dissertation. University of Notre Dame.

Chapter 5
Motivation to Study

This chapter addresses the issue of motivational drives to study and complete a degree. The organising structure is again based on the motivational facets of the framework. Under each of these sections there will be a substantial body of illuminatory evidence from the three groups of students.

Each facet features a contrast between the undergraduate and community college samples. The contrast is instructive because it compares the high achieving undergraduate sample, who have been successful enough to win a place in the elite UGC-funded universities, with the community college students whose examination results were generally insufficient to gain a place at university.

The contrast is, therefore, in the main between a highly motivated group and a less motivated one. A major reason for the good examination results of the undergraduate sample was their motivation to study at school. This level of motivation then tended to be enhanced by the success of getting a place at university and the experience of university study. The community college students, by contrast, could have been less motivated at school. Their confidence and levels of motivation would have been depressed by the failure to win a university place. Many found the environment of the community colleges depressed their motivation to study further still.

Individual Goal Setting

Undergraduates

Individual goal setting was the target each student set for themselves. The goal was commonly expressed as grades or a GPA score. The targets normally seemed to be quite realistic. With frequent public examinations in the school system and grading at the end of each semester at university, the students presumably had a good idea of what they were capable of achieving. The goal set a balance between how much work they were prepared to do to achieve the goal and being able to do other things.

D. Kember, *Understanding the Nature of Motivation and Motivating Students through Teaching and Learning in Higher Education*,
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> In my first year of study I set a goal and got a very good GPA, about 3.4. I was very happy as that was what I hadn't been able to achieve at secondary school. In fact, this is out of expectation. I didn't think I could do that. Getting a good GPA made me work harder to sustain my excellent academic result. However, my classmates told me that was no good. I put lots of stress on myself, like heavy burdens. I would have to carry them for three years or even more if I am going to further my study. They taught me how to release the burden. Studying is not my whole world. (COMM01)

The communication student above had set a high goal initially, but had relaxed this somewhat as the degree progressed. The social work student quoted below set a lower goal. This was influenced by fairly negative positions on other continua.

> Some of my classmates were very good at their studies, certainly I couldn't compare with them but I'm so-so. I knew I could do better but I wasn't working hard enough therefore quite so-so. (SW04)

As the goal set was reasonably low, the work commitment was reduced. Those with higher goals put more effort into their studies.

> The problem was once when I was in the hostel, you're alone feeling bored didn't want to study at all, might prefer to ICQ [a form of computer text messaging] with your friends. Basically time flies rapidly once you are on the internet. And time was being spent like this day-after-day. (SW04)

An engineering student set lower goals than some of his classmates and therefore did less work and received lower grades. Comparing himself to others in the class seemed to be more as a sense of reference than evidence for the existence of competition.

> Most of my classmates are aiming for high grades. … I did not work hard in order to compete with my classmates for the first two years. I aimed for understanding the course content but my classmates would dig deep into the issues. Now, I am regretting what I would have done but I didn't. It would be better if I have put more effort into my study. … Basically, nobody wants to be the bottom one or get a third class honours degree. I don't think I can get a first class honours as it is too late. I aim at getting an upper-second class honour. (MENG01)

There was little evidence of competition in setting personal goals. Normally the reference was to get a particular grade or GPA as the individual target, rather than to trying to do better than others. This goal was normally individual and personal and was not an expression of competition with other students.

> Competition does exist, but underneath the table. I think curiosity is one reason, but mainly they want to measure the strengths and abilities of others. (CHEM03)

There is an abundant literature from goal theorists, of which a major component has concentrated upon the classification of goals. The earlier literature contrasted mastery and performance goals (e.g. Ames 1992), though alternative terms and variations in definitions are common. The major distinction being that mastery is a self-referenced goal of achieving competence, whereas performance goals compare performance with other students. More recent work (e.g. Elliot and McGregor 2001) has added approach and avoidance foci as an additional dimension to the performance and mastery goals; so forming a four category classification system.

The undergraduate data showed little evidence of avoidance goals because they were highly motivated students qualified for entry to the elite university system. The community college sample did show evidence of students motivated by fear of failure.

As there was little explicit mention of competition in the interviews, the goals identified in this study seem more consistent with mastery than performance. They are not entirely consistent with the way mastery goals are normally described in the literature, however. The interviewees most commonly expressed their goals in terms of grades or GPAs. These were essentially norm-referenced at the time, though the interviewees seemed unaware of this implication.

The original formulations of achievement motivation relied upon Western psychology texts to describe it as an individual competitive drive (Biggs 1987). The personal goal setting dimension in this context therefore appears to differ from this traditionally defined individual form of competitive achievement motivation. It is not clear whether this was a cultural phenomenon and competitive goals might appear to be more common in other contexts. If this does turn out to be the case, the motivational orientation framework is still appropriate. It will mean that there may be some variation in the nature of the personal goal in different contexts or students may have alternative ways of formulating their goal.

Community College Students

The goals of the community college students were often set lower than undergraduates. Evidence for this assertion came from the number of community college students who cited instances when they or their colleagues were distracted from studying. This had presumably been a long term phenomenon, which could partly explain why those who had gone on to undergraduate study had performed better in the school examinations.

> Some would be playing computer games; some would be listening paying attention in class; some would be listening to music; some even played cards; some would be doing their homework and some copying homework from others. (CCB03)

> I think my motivation drops a bit. This is because I am learning something new which I have to make a start from zero. That is a bit tough for me. Also, I do not adapt to the distribution of workload. We are free for some time and suddenly a pile of work stacks up. Perhaps I have not yet adapted to this practice. (CCC04)

There was also evidence of the community college students being less able to stick to long term goals. The latter part of this section will explain that the long term goals were the difficult ones of doing well enough academically to gain one of the limited places for students transferring to university. However, in the short term many of the students did not have enough commitment to the goal to behave in a way which gave them any chance of achieving them.

> During the first semester, since we had a lot of spare time, I just let time pass by aimlessly. Seemed like I didn't learn anything at all. I did not pay attention in class, if my peers were playing computer games under the table, I would get affected. (CCB04)

Chapter 3 contains a discussion of the relationship between the individual goal facet of the motivational orientation framework and goal theory in the literature. The part of the discussion on avoidance goals and fear of failure is pertinent to the community college students and is illustrated with quotations from them.

Sense of Belonging

Undergraduates

The inclusion of both the personal goals setting and the sense of belonging dimensions proved to be a way of resolving the nature of achieving motivation as individual or social. The personal goal setting dimension is an individual target. The sense of belonging facet provides a social or communal dimension to motivation. The two can clearly exist in harmony. Each student has their personal goal. Their overall motivation can then be boosted if there is a sense of belonging among the class cohort.

The sense of belonging dimension of motivation was high when students had developed a high level of coherence within their class cohort. Programmes in Hong Kong tend to be reasonably tightly structured with a limited range of options, so that many students spend much of their time as a class group. As the sampling was of four students for each selected programme, it was possible to get a good picture of class coherence.

It was clear from the interviews with the four communication students that their cohort had developed a strong sense of belonging. Each of the four indicated that they were a very coherent group who motivated each other. If a strong sense of belonging was developed, motivation took on a social form, rather than being individual or competitive.

> There are more than a hundred students but we still know each other. … We regard our classmates as a companion instead of as a competitor. … Treating your classmates beside you as competitors is narrow-minded. I also think that kind of working attitude lacks synergy. I mean the atmosphere of having no mutual trust. I think the right way is everybody tries their best to maximize the profit. For example, I am good at studying but you can present well. Perhaps you can do better and faster and deeper in interviewing the subjects. We try to help and compensate for each other. (COMM01)

The business student had developed a sufficiently strong sense of belonging to the class that this had developed into an affinity towards the more abstract concept of the university (Kember et al. 2001). Even though the university is one of the least prestigious in Hong Kong, there was still pride in being a student, and eventually graduate, of it.

> You will regard yourself a member of the university. Thus, you would like to stop causing any unpleasant feeling on or giving a hard time to [university]. I am proud of my department and my university. I won't try to say that I am a BBA graduate by omitting which university I come from. (BUSS01)

The social work student seemed to have low levels of affiliation with either classmates or other university students. Her closest friends were from her secondary school class. This appeared to influence other facets of the framework, so the student ended up with a low overall level of motivation. The four interviews with social work students indicated that the class was one of the less coherent ones, which meant there was little positive effect from the social dimension.

> If you are to ask about our major, it is true that we don't see each other much after lessons for we only care about doing our own papers. Rarely will we discuss our homework therefore normally, we will only interact in class and don't feel much about the existence of competition between one another.
>
> Over the past two years, I don't think I have really enjoyed my life at the hostel, I've discovered that actually I enjoyed staying at home and my closest friends, from secondary are all in [location]. (SW04)

Community College Students

The community college classes also showed considerable variation between classes and perhaps also more within class variation. There was evidence of motivation through cooperative spirit.

> Though the project work should be done individually, we prefer working together. We will share and discuss before working alone. We can learn from the ways how the others do the work. It is nice that all the classmates in my group are willing to share. (CCC02)

There were also classes with a lower sense of belonging. This was mostly attributed to the competition for places to get into a degree. The poor facilities and lack of space for meetings at the community colleges were also an influence, hampering the development of a sense of belonging.

Belonging to a Social Group

With the undergraduate sample, a strong sense of belonging enhanced study. When there was class coherence the students encouraged each other to study and in some cases helped each other understand material. Where group projects were set, a great deal of effort went into them in a coherent class.

In some cases for the community college students there were similar positive observations. However, there were also cases where group coherence could lead to de-motivation to study. The strong group spirit was focussed towards socialising together. The expectations of groups, such as these, was not to study.

> We went out for singing karaoke, watching films and spending two hours for lunch. Depravation was my life at that time. (CCC01)

The impact of this phenomenon was magnified by the poor campus facilities. The 'campuses' of the community colleges consisted of small tower blocks or rented space in commercial buildings. There was little room available for individual or communal study. Most were located in busy down-town areas with many distractions.

> We had classes from 9:30-11:30, and then we hadn't any class till 3 in the afternoon, I don't think this is good. Besides having lunch, a lot of us would play computer games, football, basketball, sing karaoke in between. Rarely would we make use of this spare time to do revision. Not to mention its location is in [busy urban area], how could anyone study in such a district like [district]. I think people would choose to window shop more than studying. (CCB04)

Interest

Undergraduates

The interest facet is reasonably consistent with classic formulations of intrinsic motivation. It is perhaps somewhat broader as, in professional courses, establishing the relevance of concepts and theories to the profession was shown to be a powerful motivating force.

The way the sampling was arranged by programme gave insights into the nature of teaching and learning within each included programme. The curriculum design and the way a course was taught seemed to have an impact on the level of interest shown by students. The communication course was well designed with a stress on practical applications, which motivated students to spend a lot of time working on assignments.

> For Radio and TV Production course, it is very interesting. You have to go to the 11/F of the Communication Faculty. It is a studio and it is very cold. You will see a blue background which is for our future key in background. You will find two anchors sit in front of the camera. Few students are responsible for the rolling of cameras. Some will do the count down and some work on panels, audio and video panels. Push the panel to fade in background. Some will be responsible for the positioning of microphones. At the beginning, you have to stand there like an audience. "3-2-1" and the anchors welcome everybody. You will find many interesting scenes. We have two times for rehearsal before the actual filming. When it is on air, everyone keeps complete silence as we are serious about what we are doing. This course is interesting and everyone has the chance to try every role by turns. (COMM01)

By contrast, the social work student found the teaching less stimulating. Human development, the subject discussed in the quotation below, can be turned into a fascinating subject, but not in the programme examined. TV production, on the other hand, can be quite tedious, taking a great deal of time to produce very little

screenable material, as takes are often shot over and over again. The nature of the teaching, rather than the subject, affected the level of interest.

> I can't say the subjects aren't interesting, let's say for Human Development, actually I find it quite interesting regarding its various stages from infancy to the elderly but since we have three months, we may use one lesson for finishing one stage, and it is impossible for us to finish reading everything at home for we have other subjects to read as well. Some subjects are interesting but some are boring and there are some that you just don't know what the professor is talking about; by the time when you finally understand what s/he is lecturing, the semester is already over. (SW04)

The interest facet is possibly the one which most clearly shows the contextual influence upon the motivational orientation. Students' levels of interest were a function of curriculum design and the nature of the teaching and learning environment. There were high levels of consistency between the comments with respect to levels of interest between the four interviewees from each programme. This again shows consistency with social-cognitive theories of motivation (Pintrich and Schunk 2002).

Community College Students

For the community college students there were many cases of comments coded under the interest category which were seen as negative impacts on interest. The teachers often seemed to be trying hard, but the overall curriculum design was problematic. Students' interest was often not captured by the broad general education design.

> This programme is too broad in some sense. We have to work with a wide range of topics or aspects. I think it is necessary to narrow the scope into certain specific streams that we can develop further. (CCC03)

The self-financing nature of the operations impacted on the interest facet because student-teacher ratio was high. This meant teachers had high contact hours and had to teach across several subjects. This meant that there was not as much time to prepare interesting lessons as they might have liked.

> Several teachers have to teach for two or three subjects. Frankly, we do not have many teachers. I think there are 3-4 constant teachers in [branch of college] and they are overloaded obviously. (CCC02)

Career

Undergraduates

The career facet differs markedly from extrinsic motivation in that it is a positive motivational force which can and does co-exist with interest and the two can mutually reinforce each other. The career facet is more consistent with the learning

orientations formulated by Beaty et al. (2005). They included a vocational orientation with intrinsic and extrinsic sub-categories. The latter was distinguished by students aiming to obtain a qualification which would lead to a job. The intrinsic vocational orientation was defined by students seeking a training which would equip them well for their future careers. This formulation is more consistent with the manifestation of career motivation in our interviews.

The business student had considered the range of potential career openings when selecting a specialisation. The prospect of a well paid career was a positive motivator.

> This degree is applicable in a wide range of companies in the sense of their nature. Say, we are human resources professionals who can work in an accounting firm or in a bank. In fact, HR [human resources] is applicable everywhere with the existence of people. This is different from other options such as accounting. Accounting is mainly dominated in business sectors but you may find that not so useful in social organizations. However, HR can be applied in large scope under the condition of people working. (BUSS01)

The interaction between the interest and career elements of the framework could be enhanced by ensuring that the content of courses and the assignments were relevant to future careers. The communication students were prepared to spend a great deal of time on an assignment closely related to activities they might perform in a future career.

> The most interesting one is the production with an output. I did a television program in my first year of study. We did that assignment by working days and nights for a whole week. We stayed at the Communication Faculty during that time for video-editing. We slept and ate there. That possibly could be the most time-consuming assignment for us. Of course, our future work cannot be predicted. However, every time we talk about this assignment, we are happy and remember the performance of other classmates. This is really impressive. We had had passion to do this assignment although it was time-consuming. We still find that assignment helpful for our later work at university. (COMM01)

The following series of quotations from the engineering student illustrate the interaction and mutual reinforcement of the interest and career facets. The student is motivated by the need for a degree, which leads to better career prospects and also provides a part-time job. Initial interest in practical subjects is heightened by establishing relevance in the teaching and setting authentic assignments. The programme of study takes advantage of its professional nature to establish a high level of interest in the contents. At the same time this heightens the level of career motivation by providing relevant preparation for the future career.

> I think that the career path for people with lower qualifications is inferior to those with higher qualifications. I mean the prospect is not so good. Thus, I decide to go to university and get my degree in order to make me more competitive.
>
> After taking engineering for some time, I found that I am interested in it. It is really practical. Then I work hard in my study and continue studying until reaching university level. It is obvious that I would like to take engineering at university.
>
> Our course includes different components, IT is one of them. I like playing computer such as webpage production, programming and the like. I have a sense of achievement when I have finished my task. Moreover, I got a part-time job by making use of this skill. For mechanical engineering, I loved it since I was a little boy. I tried to create a gun by myself a long time ago. (MENG01)

Community College Students

The associate degrees are named and arranged in vocational streams, but the curricula do not appear to be designed as terminal vocational awards. There is a high proportion of general education in the curriculum. This reduced the credibility of the award for career preparation. Rather than seeing the motivating influence of subjects related to a future career, the students were often de-motivated by the general education subjects. These tended to be seen as a continuation of what they had to study at school. If they had not enjoyed or been good at these subjects at school, having to take them again in post-secondary education was de-motivating.

> I think general education courses are also important but I think the proportion of their credits can be reduced. Taking Chinese, English and Mathematics are important particularly Chinese, if you don't have a good Chinese background, you can't move on to reading elite materials from the area of Chinese medicine. But I think the number of credits can be reduced such as from 3 to 2 credits. (CCB05)

The students had picked a vocational stream in terms of an eventual career. But they did not see their programme as a terminal award. There must be concern at the failure of associate degrees to be seen as either terminal awards or providing a suitable grounding to embark on a career. Especially since, in most cases, neither do they articulate with undergraduate degrees in UGC-funded universities. Even one of the more vocationally oriented programmes was criticised as not relating closely enough to future careers and thus not enhancing the career motivation facet. The community college sample would, therefore, generally have positions on the career continuum well behind that of the undergraduate sample.

> I think those courses learned in the first year were unnecessary. It seems that they are not that relevant to real estate. I would rather to have more courses directly relating to real estate. (CCF02)

A vocational college did manage to motivate students by ensuring that the curriculum was highly relevant to the vocational field and by incorporating opportunities for professional practice. This shows that interest can be stimulated through career relevance. It also suggests that associate degrees offered by the community colleges might benefit from an enhanced vocational orientation, rather than the current emphasis on general education.

> I had received training in the [café], a subdivision café of [restaurant]. I really learned a lot from such practice. By now, I make up my mind and I would like to stay and work in this field. (CCF01)

> Frankly, what we learn here is exactly the same as the real practice in the industry like tourism agencies, restaurants or hotels. For example, we can try the ticket booking system that is identical to the real one. I am quite surprised by the authenticity of our learning materials. It is very helpful to get us well prepared to work. I am satisfied with such arrangements. (CCF01)

University Lifestyle

Undergraduates

Most of the undergraduate students go to university straight from school. University campuses are mostly small in size by Western standards, because of space constraints in Hong Kong, but they are well equipped. The range of facilities and activities available would be a marked contrast to school. University, therefore, provides an attractive lifestyle to most undergraduate students.

There has recently been investment in student hostels at the universities as the UGC believes that on-campus life provides an important broadening experience. Most students should be able to spend a year in a hostel, if they so wish. This provides an opportunity to participate in hostel activities and have more time for on-campus activities. It also gives them a chance to get out of the family home. The opportunity of staying in a hostel, therefore magnifies the attractions of the university lifestyle.

Universities offer an enjoyable social life as well as providing an education. The social benefits from becoming a university student and adopting a university lifestyle are particularly attractive to those going to university soon after completing secondary school. This was the case for most of the sample in this study.

> Why did you decide to go to university? I want to play. [Laugh] Studying is different from working somehow. I heard from senior students that university life is fascinating and attractive. Inevitably we seem to have to study at university. (BUSS01)

More student hostels have been provided for universities in Hong Kong in recent years; so for some of the students going to university meant moving out of the family home to live in a hostel. This meant greater opportunities for a social life.

> Besides, I live in the hostel. Thus, I always meet some students in the hostel when using the lift. Then we try to talk with each other. Finally we become close friends. The main reason is that we have got more chances to see each other as […] university is not large. We just have three canteens here. Thus, it is quite easy to meet your classmates or friends here. (COMM01)

The opposite end of the university lifestyle continuum has the label costs and obligations of attending university. These costs were invariably the tuition fees which had to be paid, which in many cases meant a future loan being paid off. Obligations to the family were also common. Several of the students had to take part-time jobs to meet their financial commitments.

> [At school] you needed not to bother about the school fees or paying a credit card bill. However, all these are your own responsibilities now. It is not only that you have expectations on your own but also for your family members too. I have to pay back the government loan for my study over these three years. Besides, I have to share the economic burden of the family. In short, I have to pay back what I have got from my family. (BUSS01)

> In terms of money, I pay $42,100. In order to make good use of what I've paid, I have to attend as many lectures as I can, do the best that I can. (CHEM03)

The cost of going to university can cause most students to question whether it is cost-effective to enrol for a degree and must deter some from doing so. The above quotations, though, suggest that once the decision has been made and the enrolment fee paid, there is an incentive to study to make sure the investment does not go to waste.

Community College Students

The community colleges have markedly different levels of facilities and opportunities to the universities. Most started out as ventures by the continuing education providers of the universities. Much of their original teaching space was in rented commercial buildings, shared with offices and shops. It is also notable that community colleges do not provide hostel accommodation.

> When you visit our bathroom, you can see the toilets being occupied all the time. There are not enough toilets but we have to share with other tenants. We have hundreds of students. (CCA01)

> We don't have a large campus like universities. We are being isolated and have to be self-reliant. For group discussion, we have to do it outside such as getting a place in the food court of [shopping mall]. (CCA01)

Most now have their own premises, but these are within a single tower block, often with a relatively small floor area. All campus facilities are, then, within the one tower block. Rather than providing an incentive to be a student, there are complaints in the lifestyle category. In terms of the orientation framework, the position on the lifestyle facet would be more towards the negative end of the lifestyle continuum than for the undergraduates.

> If possible, please move to another location. We need more space so that we can have a bigger common room. It is overcrowded all the time. Besides, I think it is inappropriate to have a school at the current location. We have insufficient resources such as books. I don't think it is possible for us to go to the [university] to borrow books. It's difficult. The nearest public library at [location] is small. Moreover, it is necessary to employ more teaching staff. We have few teaching staff. (CCA02)

> We had a very small campus, I tried to find a place to sit and read but I couldn't. I checked on every flight but could find none because all seats were occupied. (CCB01)

Compliance

Compliance is an unquestioning attitude of doing whatever tasks and assignments are set up to a threshold. Each student will have a threshold at which complaints start and questions are asked about whether the assignment can be completed. The threshold is influenced by the context of the programme and is reflected by a position on the continuum.

Compliance is also influenced by the long-term levels of the other facets. The motivational orientation framework is a dynamic model in which levels of each facet of motivation change according to the context and personal circumstances. For most students, though, these changes operate over a reasonably lengthy timeframe. Personal goals might change somewhat each semester when grades are announced. Levels of interest might also operate on a semester timetable and vary with the units selected or the quality of instructors. Study, though, is a daily task. It is the compliance facet which operates on a daily basis, but the level of that compliance is dependent on all the other facets.

Undergraduates

The students in this sample were full-time undergraduates in an elite university system; so the threshold tended to be quite high.

In one of the cases, an engineering student reported a heavy workload. Even though the workload was heavy and oppressive, the work was completed and handed in. In the final year working through the night was common, in spite of the student having lower personal goals than most of the selected cases. The long hours of work seemed to be accepted as a necessary fact of life.

> The workload is heavy. We always have to give presentations for the group project on business. Lots of time for preparation is necessary. We have to do more research in order to enrich our presentation. I have never worked overnight in the first two years but it is frequent for me not to sleep but work in the final year. It happens almost once a week. (MENG01)

The high level of compliance in secondary school is not surprising in view of the pressure on students in Hong Kong from teachers, parents and fellow students to complete homework and perform well. Progression to senior years of secondary school and to university is confined to an elite; so there is considerable pressure to do well in examinations to proceed to the next level. The quotation below is a quite typical example of the type of pressure parents can place on their children. Is it any wonder that studying for assignments, tests and examinations takes place without question? It was noticeable though that for some students, like the social work student quoted above, the threshold had slipped significantly between secondary school and university, reflecting the different contexts.

> They would force me to study; beginning from primary, they would force me and watch over me just to make sure that I had finished doing all my studies. They would give small gifts to me for achieving good results, therefore my results were good in the past at primary. At primary, I wasn't allowed to go out to play; I had a structured timetable for watching TV just for a few hours; had to revise homework every morning therefore I did not have any interests. I did not even have an interest in playing computer games and since I did not have any interests, all I could do was to study. This was how they had nurtured my study habit and such habit progressed forward to secondary, all I did was to study non-stop. (CHEM03)

Community College Students

In most cases the compliance threshold was somewhat lower than that for the undergraduate students. Evidence was from the number of comments indicating that work had not been done. This was presumably a factor affecting the better performance of the undergraduates, which enabled them to gain a place in a UGC-funded university.

> It is hard to extract your time and mind from work to study. How can you spend your time reading books after working for a whole day? By now, I won't do that even if I am a full-time student. I am rarely engrossed in reading books and studying. I will be motivated to work harder if there exam draws near or I have to hand in assignments. (CCD01)

There is no doubt that if those who chose not to continue with study were examined there would be lower thresholds still. Hong Kong schools are banded by ability. There is evidence that those in the lowest band schools become conditioned to educational failure (Watkins and Biggs 1996). In terms of the framework, this could be interpreted as a form of compliance consistent with poor performance or failing to complete academic tasks.

In other contexts negative forms of compliance must be common. There is often a tendency for those from lower socio-economic backgrounds or relatively deprived regions to be markedly under-represented in higher education. Leathwood (2006) and Nowotny (1995) believed that the move to mass higher education in the West has been successful in reducing or removing gender inequality, but has had less impact on socio-economic inequalities, with the children of working-class families still being under-represented. These socio-economic inequalities can be interpreted as a form of compliance in that there is an unquestioned tradition of not striving to succeed at school or proceeding to higher education.

It is likely that this negative form of compliance is less common in Confucian-heritage societies as there is a tradition of one generation making financial sacrifices for the educational benefit of the next (Kember and Watkins 2010). As a result the socio-economic distributions of higher education students can be different to those in the West and first generation university students are relatively common. The fact that parents or other family members had not had a university education can actually be a form of positive motivation to enter higher education (see Chaps. 4 and 9).

Conclusion

The chapter has considered the facets of the motivational orientation framework in turn. For each facet there have been typical quotations from the undergraduate and community college students. In general, the undergraduate students displayed higher levels of motivation on each facet than the community college students.

These higher levels of motivation could be represented on the framework by positions on the continua closer to the positive ends.

Note, however, that the levels of motivation of the undergraduate students are not consistently high. There are several quotations in the chapter from a social work student (SW04) who admits to not being as motivated as she was at school and not enjoying hostel life. The other three social work students who were interviewed also displayed levels of motivation which were generally lower than those in the other courses.

It is also instructive to compare quotations from the community college students between the previous chapter and this one. The quotations in the previous chapter were all taken from the initial interviews. In spite of them not doing well enough in their examinations to obtain a place in the UGC-funded universities, they were sufficiently motivated to continue into higher education that they committed themselves to further study in the community college sector.

All but two of the quotations from the community college students in this chapter were taken from the final interviews. They show that initial positions on each facet of the motivational orientation framework had tended to shift towards negative ends of the spectra. This illustrates well the dynamic and contextual nature of the framework.

The contextual or relational influences which cause these shifts in motivation will be examined in the following three chapters. Chapter 6 presents a multi-faceted model of a teaching and learning environment, each element of which can influence levels of motivation. Chapter 7 looks at curriculum-level contextual influences. Chapter 8 adopts a system-level perspective. It contrasts the established elite UGC-funded university system with the newly emerged community college sector. In doing so, it examines system-level influences on motivation as higher education transitions from educating an elite to mass education status.

References

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, 261–271.

Beaty, L., Gibbs, G., & Morgan, A. (2005). Learning orientations and study contracts. In F. Marton, D. Hounsell, & N. Entwistle (Eds.), *The experience of learning: Implications for teaching and studying in higher education* (3rd (Internet) ed., pp. 72–86). Edinburgh: University of Edinburgh, Centre for Teaching, Learning and Assessment.

Biggs, J. (1987). *Student approaches to learning and studying*. Melbourne: Australian Council for Educational Research.

Elliot, A., & McGregor, H. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology, 80*, 501–519.

Kember, D., & Watkins, D. (2010). Approaches to learning and teaching by the Chinese. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology*. Oxford: Oxford University Press.

Kember, D., Lee, K., & Li, N. (2001). Cultivating a sense of belonging in part-time students. *International Journal of Lifelong Education, 20*(4), 326–341.

Leathwood, C. (2006). Accessing higher education: Policy, practice and equity in widening participation in England. In I. McNay (Ed.), *Beyond mass higher education*. Maidenhead: Society for Research into Higher Education and Open University Press.

Nowotny, H. (1995). Mass higher education and social mobility: A tenuous link. In D. D. Dill & B. Spoon (Eds.), *Emerging patterns of social demand and university reform: Through a glass darkly*. Oxford: Pergamon.

Pintrich, P., & Schunk, D. (2002). *Motivation in education*. Upper Saddle River: Prentice-Hall Merrill.

Watkins, D., & Biggs, J. B. (Eds.). (1996). *The Chinese learner: Cultural, psychological and contextual influences*. Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Chapter 6
Motivating Students through Teaching and Learning

Responsibility for Motivating Learning

To those with a learning or quality enhancement role in universities, discussions with teaching staff frequently refer to the motivation of students. This can take several lines. One which is all too common is in the form of complaints that students are not motivated to learn. Maclellan (2005) observes that it is a common belief among academics that motivation is something which students do or do not possess.

Variants upon this are statements that students are no longer as motivated as they used to be. The comparison is often with times when entry to university was relatively elitist. Those who subscribe to this viewpoint believe that the more diverse student body brought about by mass higher education are less motivated than those who won places at the time of elite entry. Those who make comparisons over time often cite contributing factors, such as a tendency towards consumerism or the need to work part-time to afford the fees students now have to pay.

Such complaints imply that motivation is a function of the student's personality and/or background and not something which can be influenced by the curriculum design or the nature of the teaching and learning environment. It displays an attitude which Biggs (1989) calls 'blame the student'.

Others accept that student motivation could possibly be influenced by the nature of the curriculum and teaching, but are dissatisfied with their own efforts in this respect. These are the staff who find it hard to motivate student learning and seek advice from educational developers. They seek practical advice on how curricula and teaching can best be configured to motivate students' learning or why their own teaching does not seem to motivate students to the extent they would like. Alternatively they want to know what the higher education literature has to say about what motivates students to choose to enrol at university and what motivating their learning.

D. Kember, *Understanding the Nature of Motivation and Motivating Students through Teaching and Learning in Higher Education*,
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Motivational Teaching and Learning Environment Framework

The interviews with the three groups of students resulted in a large body of data in which the students reported their perceptions of the types of courses and teaching and learning which motivated them to study. In this chapter, this database is analysed to produce a set of themes, which can be used to characterise a teaching and learning environment conducive to motivating students to study.

Analysis of the transcripts by main themes reported as being conducive to motivating student learning resulted in eight main categories or themes. In each case there was a corresponding de-motivating element. The complementarily between motivating and de-motivating facets of a teaching and learning environment is seen as providing a degree of validating support for the analysis.

The eight themes are presented as a motivational teaching and learning environment framework. Each of the themes is represented by a continuum or spectrum with a positive motivating end and a negative de-motivating end. Each continuum constitutes a part of a teaching and learning environment. The facets of the environment interact, which is represented by the double-headed vertical arrows (Fig. 6.1).

Teaching and Learning Environment

Taken together the eight themes of motivating elements can be seen as characterising a teaching and learning environment conducive to motivating student learning. It appeared necessary to pay attention to all eight elements, to provide a teaching and learning environment conducive to motivating students. The eight elements are listed below.

- Establishing interest
- Allowing choice of courses so that interests can be followed
- Establishing relevance
- Learning activities
- Teaching for understanding
- Assessment of learning activities
- Close teacher–student relationships
- Sense of belonging between classmates.

The following sections will deal with the facets of the teaching and learning environment. Each will be illustrated by typical quotations derived from the three studies.

Most of the quotations in this chapter are from the undergraduate students. The analysis of parts of interviews with them about classroom teaching and learning was sufficient to derive the teaching and learning environment framework and numerous

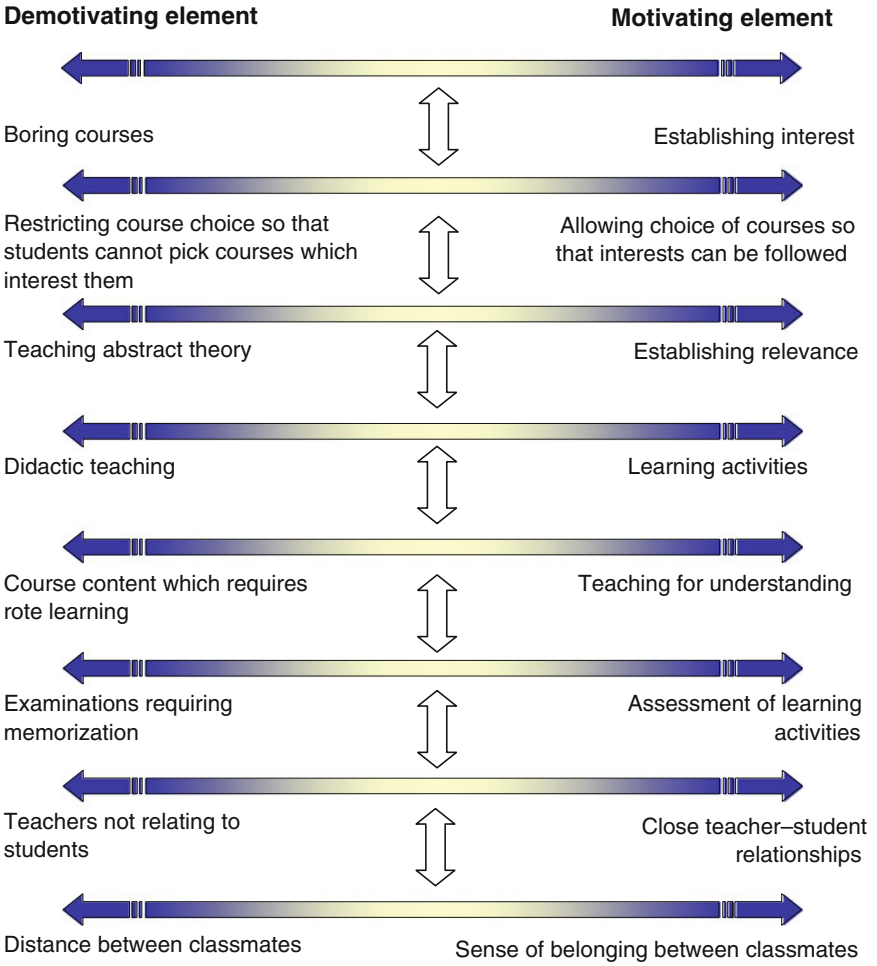

Fig. 6.1 Motivational teaching and learning environment framework

typical quotations to substantiate and illustrate it. Analysis of the data from the interviews with the community college and TPg students added little extra information about motivation through classroom teaching. There were though insights into the motivational influence of curricula, which is the topic of the next chapter. The interviews with the community college students revealed issues relating to both curricula and systemic issues which are dealt with in Chap 8.

Two cases from the undergraduate students are used to illustrate the supportive conditions for motivating student learning: one student from the business discipline, studying in the former liberal arts college, and a student from chemistry in the research intensive university. Quotations from the business student are indicated by (BUSS01), while those from the chemistry student by (CHEM03). Reporting the

two cases in detail, rather than drawing upon quotations from all interviews, seems to provide a more comprehensive picture of an environment and show better how the elements worked together to make a whole. The interviews with the other three students in the two selected programmes were used to verify the substance of the comments included as quotations. There was, in fact, a high level of consistency between the main themes emerging from the four interview transcripts for each of the two programmes.

Establishing Interest

One of the themes which came through strongly in terms of motivation was interest. Of the 36 undergraduate interviewees, 28 mentioned interest as an element in their motivation.

> Interest is most important. If you are not interested in chemistry, doing labs will be very toilful for you. (CHEM03)

The level of interest seemed to be partially an expression of individual preferences. There were individual differences between students, expressed as preferences for different types of subject. What they had taken at secondary school had been influenced by these preferences. Their reaction to studying the subject at school influenced their choice of degrees to apply for admission to. The chemistry student was one of a minority who expressed an interest in the same subject studied at school, mainly because of the experimental nature.

> Actually chemistry requires hard memorization too, before HKCEE, I disliked chemistry. To me, it was in between physics and biology, I often felt that biology required plain rote learning; physics involved a lot of calculations whereas chemistry was like a mixture of the above two, requiring one to rote learn and to calculate as well. Actually I disliked chemistry, but when I reached Form 6, doing experiments was fun. (CHEM03)

The other aspect of the level of interest was that it was partly a function of the nature of the teaching and learning environment. Whether or not students were interested in a subject was dependent upon the curriculum design, the nature of teaching and the way in which content was taught. For the chemistry student interest was developed through the experiments. Though, to have this effect the experiments must have been reasonably well designed. Experiments per se were not motivating, as students in other programmes found them tedious.

> In labs, I'm able to see changes and I know what I'm doing. During lectures, I'm able to recall what I have done in my experiment, better memorization so-to-speak. In addition, the ability to do well in my study has also increased my interest. Even though I do not achieve good results every time but it is fun to conduct experiments in organic chemistry. Even though I may have to work for a few hours, quite tiring but I'm able to understand and learn a lot from it. (CHEM03)

Another important factor in establishing interest was related to the degree of relevance discussed in more detail below. A common complaint was excessive teaching of abstract theory. Students found it more interesting if the application of the theory could be shown. One of the other chemistry interviewees found that the most interesting teaching was that which related chemistry to everyday life.

Boring Courses

The negative end of the interest continuum is labelled 'boring courses'. One of the main factors in choosing a degree is the interest in subjects at school. All too many of our interviewees chose to avoid subjects they had studied at school as they had not found them interesting and did not want to continue studying the same subjects at university.

> I was an arts student. I studied Chinese history and Computing. There is no subject related to management. We always need to recite lots of things. We had to write an essay of more than thousand words in order to respond to one sentence only. We acted like a typewriter and wrote down everything we had recited in the exam. I didn't take Chinese History or Literature. I am not interested in these subjects. I took these subjects for HKAL as I have got no choice. I love to deal with different kinds of people. I am not interested in pure subjects such as Literature. (BUSS01)

Interest was clearly not entirely a function of individual preferences. What was taught and how it was taught clearly had a major impact on students' level of interest in a course. One factor which decreased interest was if material appeared redundant in nature. This could happen if there was inadequate coherence between the contents of courses resulting in repetition.

> The materials are very similar for management except for few slightly changes. Then we got to do a project. To be frank, my attitude is not that good on some occasions. I just want to get it done! Looking back, the materials were interesting to me at the beginning as they were new to me. While learning similar things for some time, I found it a bit boring and my motivation is diminishing. The main reason for that is I found the subjects boring. (HTM01)

Establishing Relevance

If teachers wish to motivate their students' learning they need to find ways to show the relevance of topics included in their courses. If relevance was established students took an interest in the topic. Establishing relevance and stimulating intrinsic interest seemed to be intimately related.

Establishing relevance was related to creating interest, in that demonstrating relevance was a prime way to promote interest. Relevance could be shown by giving an application of a theory. The relevance of material could be shown by

relating it to local applications, real life examples or everyday application or to current topics (Kember and McNaught 2007).

Relevance to Local Issues

Textbooks normally come from the USA or the UK. Any examples in them are normally of the country in which they were written. It must seem to Hong Kong students that both theory and applications come from Western countries. It is therefore a good way to establish relevance by showing that theory applies to local issues.

> Maybe it is good to open some new programmes especially related to Asian cities. For example, casinos are famous in Macau but we don't have any courses about it. I think that is better to include some elements peculiar to Asian cities. (HTM01)

Relevance to Everyday Applications

Another way of establishing the relevance of topics was to relate them to applications in everyday life. The chemistry student quoted below wanted to know how chemicals and chemical reactions were used in daily life.

> I think it is important to relate chemistry to daily life and that it has to be applicable to our daily life. (CHEM03)

Occupational therapists spend their working time designing treatment plans. A course which focussed on cases taken from everyday working experience would therefore seem relevant to students.

> Comparatively, we had more group work in the second semester. We had had some cases, case illustration. Based on the information provided, we had to design the treatment plan. We analysed a case by referring to the performance components. (OT01)

The case below is a negative example of how mathematics can seem to be a theoretical rather than a practical subject if relevance is not established. Unless practical applications are explained mathematics becomes an exercise in learning procedures for performing seemingly pointless calculations. Some readers may know that logarithms and tangents do have practical applications, but they had not been illustrated to the student quoted below.

> Learning is definitely not how many theories that you can memorize. The most important is applying what you have learned in your daily life. In secondary school, we learned something called log and tangent in maths. At the time we were learning that we were able to do the calculations. However, I am sure most of the students who do not pursue their study in maths will soon forget that. We are unable to put them into a real life context.

> Perhaps we have to learn these things in order to fulfil the requirement of the syllabus. I wonder how important they are to me now. (BUSS01)

Relevance to Current Topics

The quotation below makes an interesting contrast to the one above by describing an imaginative application of theory in mathematics. Relevance is heightened because the incidence of people being overweight has recently become a serious concern in Hong Kong as many have turned from traditional Asian diets to Western fast food.

> I have never thought that maths is applied in so many different areas. For example, we did a statistics project which measured different body parts in order to find out the fat ratio. I was happy to see that work out successfully. It really works! This saves our time in shortening the complex fat measuring procedures. We have set up our own formula which we proved. (MATHS02)

It should be noted that the ways of showing relevance are consistent with the findings from the interviews with award-winning teachers involved (Kember and McNaught 2007, p. 38). The book derived a set of ten principles of good teaching, of which the relevant principle here is:

> Establish the relevance of what is taught by:
>
> - using real-life examples,
> - drawing cases from current issues,
> - giving local examples, and
> - relating theory to practice.

De-Motivating Effect of Abstract Theory

The antithesis of establishing relevance is teaching abstract theory. One of the most common reasons given for lack of motivation was if teaching was purely abstract or confined to theory.

> I dislike inorganic chemistry for it is too abstract. (CHEM04)

As NVivo software was used to record the coding categories, it was possible to examine the incidence of particular themes. Comments about abstract theory were made by 21 out of 36 undergraduate interviewees. This figure is interpreted as a high incidence in itself, but is very likely to be an underestimate. The coding of the transcripts was undertaken as a search for common and significant themes. Sections of the transcripts were, therefore, not coded and would not have shown up in the search. It is also possible that interviewees held similar views on this topic, but did not mention them in the interview. The interview schedule was kept open to avoid

leading interviewees towards particular positions. The consequence of this safeguard is that topics may not be raised.

> At the moment, I am learning some theories which are not that practical. (COMM02)

It was not just that the abstract theory aroused little interest, it was also hard to understand in many cases. Without seeing an application which put the theory in context it became hard to grasp the meaning. It was also more difficult to frame suitable questions to advance understanding.

> If the content is abstract or difficult, we may not be able to understand and we all just sit there. We may not be able to ask questions as we are not sure about what we got. We hesitate as we are afraid of asking inappropriate questions (COMM03).

There is obviously a logic for including theory within a university course. Theory is the foundation on which applied knowledge is constructed. It is therefore important to have a thorough understanding of conceptual theories. The problems arise if courses are largely restricted to theory and students fail to see the relevance of it. In which case the students see the material as abstract theory which they have to learn for no obvious reason.

> Sometimes, students are reluctant to attend classes with lots of theories taught. (COMM04)

The issue can seem particularly troublesome if the programme is a professional or applied one. Students tend to enrol in such programmes because they wish to learn the applied skills they will need for their intended career. If instead they are taught abstract theory and its application is not explained to them, they can become demotivated.

> After taking this course for about three years, I find my current options are more theoretical based. … We are confused as we have to learn lots of theories for a communication programme. (COMM04)

Applying Theory

Being given the chance to apply theory gives students a chance to see whether they understand it. Application also demonstrates how the theory is relevant.

> For example, finance management involves lots of content related to accounting; like balance sheet or cash flow. After having the lecture, we have to do some practical exercises. If we are unable to work it out, we can raise questions. I think I can learn from this practical way of teaching. (HTM03)

The above example is of a small scale application in the form of an exercise or problem. The quotation below illustrates a larger scale application in which a body of theory is applied to the type of activity which professionals in the field would engage in.

> We learn lots of marketing theories, and then we have to base on these theories to … How can I explain this? Building up on the top of these theories, we are able to create our views. For example, we are told to run a business through application of the theories. In between, we are allowed room for creativity in doing this particular project. I quite like that. (HTM04)

Learning Activities

Motivation also came through being involved in learning activities. Looking across the whole set of interviews, a wide range of types of active learning was mentioned. A distinction came out clearly. Students commonly contrasted sitting passively in lectures, which was generally uninspiring, to being engaged in learning activities. These ranged in the degree of motivation they afforded, but purely didactic courses should clearly be eschewed.

For the business programme, it was common for students to work in groups doing projects or giving presentations. The following quotation from the business student describes his best experience of doing group work. He enjoyed the project in which he was required to work in a group of students majoring in different professional studies. He anticipated that such experiences would be useful for future work, since most businesses function as multi-disciplinary teams.

> The subject is called Strategic Management. We form a group with students from different professional studies. Everybody has to contribute what they have got from their professional studies. This is really necessary for us to work in groups. I think this is common for us to work in a similar way in the future. I really appreciate such kinds of group work. (BUSS01)

There was a relationship to the previous facet of relevance. The group project was seen as highly relevant to future career needs, so was highly motivating. In the beginning, though, the business student was not motivated by his individual research project. He regarded the work as meaningless until he talked with his supervisor, who clarified the purpose of the activity.

> To be frank, I don't think it is possible for us to really conduct research individually. What we are doing now is copying from different sources. It is uneasy for us to do a creative or innovative research project. I can't deny that our research is not up to standard. However, my supervisor told me that is a chance for me to practice and learn what research is. This is a trial only. When I view from his perspective, I find it meaningful and useful for me. At least, I have learned how to read journal articles, theses and develop an interest. (BUSS01)

Perceived relevance also influenced the chemistry student's perception of the motivating influence of types of activities. The interest in experimental work has already become clear. On the other hand a non-experimental project was not seen as authentic and thus became a task to be completed.

> We have done one project and that was… like researching on cosmetics to see their chemical content. We strolled through supermarkets, took some photos but it was

> impossible for us to take home samples and analyse them. We were like 'discussing war tactics on paper', since we couldn't do much, all we did was to copy what's written at the back regarding their chemical components, find some books, draw out their structure. (CHEM03)

Didactic Teaching

The de-motivating end of the action learning spectrum is didactic teaching. It is a type of teaching which did not normally inspire students but unfortunately seemed to be the prevalent style for those interviewed. As Lammers and Murphy (2002) found that the lecture is the most common form of teaching in higher education.

> One of our professors who is old uses the traditional teaching method. He talks and writes at the same time. There is no eye contact between him and us. As a result, we raise our hands when we don't understand but he can't see. He is not responding to us. Consequently fewer students dare to attend such classes. (MATH03)

There are those who believe that Hong Kong students prefer didactic teaching. However, the evidence is that any who display a preference for passive learning have become conditioned by a long history of exposure to didactic teaching (Kember and Gow 1991). There can be some initial resistance to more interactive forms of teaching and learning, but once they have become used to more innovative forms of teaching, there is normally a preference for them (Kember 2000; Kember et al. 2001).

> I think the main difference is on the ways of teaching. I am not sure the professors are making our lives easy or for other reasons, the current teaching methods are quite like what we did at secondary school, spoon-fed education. We are given lots of materials. Actually, I expected that university students should be active in their learning such as searching information. What we got from lectures should be something general. Then students needed to think a lot based on the principles or theories. Now, I find my professors are teaching details. It seems a bit exam-oriented to me. (MATH03)

A rationale teachers commonly give for favouring didactic over interactive teaching is that they have insufficient time for the latter if they are to cover everything in the curriculum. The result of having an over-packed curriculum is that teaching staff are forced to spoon-feed students. What many do not realise, though, is that covering content does not equate to students learning the material.

> I believe that the course is tightly packed. As a result, the professors need to teach quickly so as to catch up with the schedule. (MATH03)

Students are less likely to ask questions in classes with didactic teaching. Student–teacher interaction is, therefore inhibited. This also has the unfortunate effect of undermining teacher–student relationships, which are another facet of the teaching and learning environment important to motivation.

> It is not that appropriate to raise out my questions in class. We can't finish the class on time if I do so. In short, I am afraid that this will slow down the teaching and learning pace. (HTM04)

Teaching for Understanding

The chemistry student rated lecturers in terms of their ability to help students understand the constructs they were trying to teach. The worst were those who could not be understood at all.

> And there are some whom we just can't follow their path of thinking, have no clue as of how we can get about studying the course, I am not used to such teaching at all. (CHEM03)

Others gave a mass of materials and left students to work out what were the key constructs.

> Some would lecture almost everything to us, told us to study their notes. (CHEM03)

Better teachers provided a road map. This helped in seeing how material fitted together. These better teachers identified the key concepts.

> Some were like secondary teachers and they would give me a sense of security for they could provide a clear direction for us, would direct certain parts for us to study. (CHEM03)

Still other teachers restricted their lecturing. They recognised the principle of learning through doing. A more thorough understanding can come through a degree of self-direction in learning.

> Some like to give minor lectures, wanting us to search things on our own, do things on our own, think on our own. (CHEM03)

An aid to understanding was the degree of coordination between lectures and laboratories. The curriculum seemed to have been well enough designed that the laboratory experiments could help understanding of the material introduced in the lectures.

> In addition, we have to do experiments for organic and inorganic chemistry, quite impressive to me, helpful in terms of my understanding of lectures. (CHEM03)

The students in the business degree also thought that promoting understanding was a hallmark of a good teacher. It was linked to showing relevance also.

> Some professors are very skilful in inspiring students with controversial issues or they can explain clearly that enables you to understand the whole mechanism. (BUSS01)

The concept of teaching for understanding can be seen as related to encouraging students to employ a deep approach to learning. There is an extensive literature on contextual influences upon approaches to learning (e.g. Marton et al. 2005; Prosser and Trigwell 1999; Richardson 2000). Such that aligning curricula to produce

teaching and learning environments conducive to a deep approach has become a prominent approach to educational development and quality assurance (e.g. Biggs and Tang 2007; Ramsden 1992).

Course Content Which Requires Rote Learning

Rote learning is a very tedious form of learning and can be daunting when the volume of material which needs to be memorised is as substantial as the contents of most university courses. If the curriculum design of courses and the assessment regime encourages or demands rote learning, students can find this demoralising.

> Even at university, rote learning is required, a necessity. In the past, all you needed was to rote learn, that's all but as you progressed upward, the ratio for understanding might make up a heavier portion but rote learning … allow me to use the term to memorize rather than rote learning, memorization is necessary. At least you need to have a foundation, if you fail to have any foundation, it is difficult for you to learn. (PHAR04)

As they have often become conditioned to remembering model answers at school, there can be some initial resistance to forms of student-centred learning (McKay and Kember 1997). However, if change is progressive and support is provided most students soon adapt. They come to realise that taking responsibility for their own learning is both more stimulating and results in more meaningful outcomes (Kember et al. 2001).

> I don't think the role of the university is to simply requiring us to find knowledge on our own. I think it should also deepen our knowledge through analytical thinking and to encourage us to obtain critical thinking as well. But according to our lessons, I don't think I have learnt much of these skills. I often have the feeling that it was just like studying at secondary. Right now, everything is being organized by our lecturers, students lack the motivation to do things with initiative. Actually we are still very much protected by the [university] environment. (SW04)

Assessment of Learning Activities

Students are assessment driven (Biggs and Tang 2007; Kember and McNaught 2007). Students concentrate their time and attention on what they perceive will result in marks for them. It is, therefore, important that the assessment is consistent with the other motivating facets. This means that the assessment needed to test understanding, award marks to learning activities and test the application of theory to relevant practical applications.

If there was a common concern, it was that there was too much emphasis on tests and examinations which tested recall rather than understanding. As many students have recognised, poorly designed examinations can reduce incentives to

concentrate on understanding material. Instead the concentration is upon remembering what is likely to be in the test paper.

> Exam is testing students' learning. If there is over-emphasis on exams, students tend to recite and memorize useful bits in order to fit in the exam requirements. I think that an exam may not be able to show the actual gain and capability of students in different subjects. (BUSS01)

Another concern on assessment was expressed by the chemistry student. He showed his concern that assessment with a heavy weighting on examinations did not provide feedback. Examinations were at the end; so did not provide feedback during the course. It also seemed common not to return marked papers; so the only feedback was a mark, which did not reveal strengths and weaknesses. Without knowing how well they performed on particular questions, students cannot find how to make improvements. This concern was not unique to the chemistry student, as a total of seven students commented upon receiving insufficient feedback.

> For exams, we don't get to see our results. But things do happen like we are both answering the same amount of things, how come your grade gets to be higher than mine. (CHEM03)

Examinations Requiring Memorization

Students in Hong Kong tend to be particularly assessment driven because of the importance of the public examinations in ensuring their successful progression from kindergarten to university. If the students believe that they need to be able to recall material to obtain a good mark in the examination they will devote their attention to memorising material. As this is a far from inspiring way of studying they will become de-motivated.

> I feeling a bit restricted in exams. We are restricted to do some set tasks. All in all, I hate reciting materials. For the exam, we have to recite relevant stuff in order to get marks. Perhaps you may have different view points. If you cannot quote the relevant citations, you are unable to get any marks. (COMM04)

Most of the programmes in which the interviewees were enrolled had a substantial part of the assessment dedicated to examinations. It is possible to set examinations which do not demand recall, but many of the teachers of these programmes did not seem to have mastered the ability of doing so.

> I think it is good to cancel the exam. Mostly, the exam questions are asking us to recite the contents and reproduce them once again. I think there is more room for students to learn in giving presentations and doing projects. (COMM04)

Close Teacher–Student Relationships

Generally, three important aspects for the establishment of close teacher–student relationships could be identified from the interviews. They were availability, friendliness and helpfulness. Teachers possessing these three qualities were more successful in establishing close and helpful relationships with students.

Unless the teachers showed that they were approachable, students were reluctant to ask for help with material or tasks they found difficult. Therefore, close teacher–student relationships had a positive influence on the motivation of students in their learning. Teacher–student relationships for the business student were quite good. The business student was willing to contact most of his teachers by going to their offices or sending them emails when he was in need of help.

> I don't find any problems communicating with my professors. We always chat and I am willing to express my view. (BUSS01)

Again there was a range, this time in the degree of approachability. Those who showed themselves to be approachable and available were the ones students contacted.

> Some professors are more willing to contact us. … We tend to contact or stay with those friendly professors. … If the professors are mean and serious, we dare not to go their office for a casual talk. Some professors are always out of office. That's a bit difficult to find them. (BUSS01)

The chemistry student also observed a range in the degree of approachability of his teachers. On average, though, the chemistry teachers were less approachable than the business teachers.

> In fact, most of them are nice, but I don't think a lot of us will ask them for help. If s/he is not in a very bad mood, s/he is willing to answer our questions. … Some professors are just like my boss, like they are in a bad mood. … I don't think that would ever happen at secondary school. … Our professors are more like weather, forever changing, this is what we think. (CHEM03)

Teachers not Relating to Students

There was evidence of good teachers relating well to students and, therefore, facilitating and motivating their learning. However, teachers who did not make efforts to relate to their students did not help the motivation of their students. The first necessity was to make available time for contact with students. A relationship cannot develop if there is no time in contact.

> In fact, I am not familiar with the teaching staff as they are very busy. Sometimes, we are unable to reach them. (BUSS04)

The next level was to develop a rapport with students. Unless students feel comfortable relating with and talking to their teachers, they will not approach them to discuss concepts they have not understood. This leads to frustration and decreased motivation.

> Some professors were very talented, felt that all students could follow with what they were saying; whereas some professors failed to know what we didn't know and why we failed to understand; couldn't communicate with them. (CHEM04)

The final aspect is the need for teachers to be willing to try to behave in a way towards their students that they can facilitate their learning. This implies making students feel comfortable to approach them when they have problems. It also implies that they have developed skills in interaction and question and answer techniques; so that they can lead students towards finding their own solutions to problems, rather than feeding them answers to problems all the time.

> I think intellectuals are like that, if you fail to think of any problems, they would regard you as a poor student, that is, they would like you to inspire them in some ways, but we are the ones who needed to be inspired by them. That is, when we knock on their doors for questions, they would throw back a few questions for us to think, if we can't think of anything, they would just request us to go home and think on our own. Afterwards, if we still can't think of the answers, they would begin by saying that we're stupid, would tell us the answers by scolding us first. Such situation would keep on re-cycling and re-cycling again-and-again. It isn't the matter whether they are easy to be found or not, it is the issue as of whether you would like to be beaten up by them. I often feel that when I look for them for help, they would show their faces, quite a torture having to look at their faces. I don't mind them scolding me, it is right for me to be stupid since I can't be as smart as they are, but I prefer to have some words of encouragement from them. (CHEM03)

Sense of Belonging Between Classmates

Sense of belonging was more likely to develop if students keep together as a class cohort for a substantial part of their degree. This was quite common in the sample of programmes, as it is common in Hong Kong for students to enter specified major streams with a restricted range of options.

This facet could then be in tension with stimulating interest through offering a free and wide range of choice of courses. The wider the choice, the less students stay together as a cohort, minimising the chance of class coherence developing. As with many issues in curriculum design, it is necessary to find an intelligent point of balance between conflicting demands.

The business cohort had established a sense of belonging between classmates. The business student believed this resulted from the small size of the class. This is certainly a helpful factor, but is not the only important variable, as other small class groups did not have such good relationships among the students.

> The class size of my option is not large. There are about 40 students only. As a result, we have quite a close relationship. (BUSS01)

A sense of belonging also develops through a class being assigned group activities. These promote relationships among the cohort (Yan and Kember 2003, 2004a, b)

> A relationship is built up through cooperation rather than having classes together. For example, we have to overcome a common problem which in return ends up with a friendship at last. (BUSS01)

Distance Between Classmates

Since the sampling was arranged by programmes, it was possible to obtain a good picture of the levels of class coherence within each programme. It was clear that levels of motivation tended to be higher in programmes with a greater sense of belonging among students in the cohort.

The chemistry class were quite splintered, though the class size was not very large and there were an appreciable number of common courses taken by all students. The didactic style of teaching and the heavy reliance on tests and examinations did little to promote interaction among the class. The low level of teacher–student interaction also did not promote student–student relationships.

> I am close with one to two of them, but I will hardly share my private thoughts with them. … Most of us talk about things happening around us or within our academic realm, rarely will we talk about my or their personal thoughts. (CHEM02)

> Why are university peers less close compared to peers from secondary? It is because we don't get to see each other often. In secondary, you were faced with your peers, the same group of peers everyday; but at university, even though you may have major course with your peers, but you are only attending one or two lessons together whereas other time is spent on attending other elective courses, attending lessons with other people. It is true that you will know a lot of people but none of them can be said as close. (CHEM02)

A heavy workload with a preponderance of individual activities or the need to revise for frequent tests and examinations forces students to study in isolation. This restricts interaction between members of a cohort; so class coherence tends not to develop.

> I wish I would have participated actively in the past 2 years. For the last 2 years, I just spent most of my time on studying. … As I found my academic performance not good enough, I would like to work harder in this aspect to make improvements. It is inevitable that I got hits and misses. That's why I joined no activities at all. I just study and read books here. I really think that I haven't enjoyed my university life at all. (MENG02)

Relationship to Other Literature on Student Learning

The nature of teaching which motivates student learning has not been a heavily researched area in higher education. There is, though, a huge body of other work on how teaching impacts upon student learning. The most relevant research to consider is that emanating from the student approaches to learning (SAL) paradigm. Firstly, because this draws conclusions from interviews with students about the way they approach learning tasks, consistent with the empirical second-order perspective adopted for the research included in this book. Secondly, it has become the dominant paradigm for student learning research in higher education, outside the US at least.

Much of the educational development or teaching quality improvement work in higher education is underpinned by the SAL paradigm. A common research format has been the investigation of how students' perceptions of the nature of teaching influence their approaches to learning. Factors or types of teaching which influence a deep approach can then be recommended as preferred. For overviews of research into approaches to learning, see Marton et al. (2005), Prosser and Trigwell (1999), and Richardson (2000). The types of teaching and learning conducive to a deep approach would generally be consistent with those included in the motivational teaching and learning environment framework.

A typical format for this type of research investigates the influence on approaches to learning of a single aspect of teaching, with assessment being both a typical example and probably the most common element. Few studies have looked more broadly at a teaching and learning environment. There are, though, texts based on the SAL paradigm, most notably Biggs and Tang (2007) and Ramsden (1992) which take a more holistic view.

Conclusion

There are academics who consider motivation to be a function of the student. While individual differences are important, this study makes it clear that teachers have a major impact on the level of motivation of their students.

The motivation of students was found to be affected by a broadly-based teaching and learning environment, characterised by the following eight principal elements.

- Establishing interest
- Allowing choice of courses so that interests can be followed
- Establishing relevance
- Learning activities
- Teaching for understanding
- Assessment of learning activities
- Close teacher–student relationships
- Sense of belonging between classmates.

The level of interest was strongly linked to motivation. Students choose to study a particular subject because they feel it is consistent with their interests. It can, therefore, help to have a reasonably wide choice of courses to offer so that individuals can select combinations of courses which are of interest to them.

Once courses are selected, the students then expect their teachers to do their best to enhance interest. One of the principal ways this could be accomplished was by establishing the relevance of what was taught. Relevance could be shown by relating theory to practical applications, to local examples, to current issues or to every-day applications. In professional programmes, relevance could be established through courses which prepared students well for their eventual profession. Career preparation was seen by students as a positive motivating force and not as an extrinsic de-motivator.

Students reported that motivation could be enhanced through appropriate learning activities. Teaching for understanding was an important component of a motivating environment. As students are assessment driven, it was important for assessment tasks to be consistent with the other elements of the environment.

The final two elements in the motivating teaching and learning environment were the social interaction elements of good teacher–student and student–student relationships. Students wanted to feel that their teachers were approachable so that they could ask for advice and help when necessary. Coherent classes with a strong sense of belonging were a motivating influence. It was possible for teachers to promote coherence through setting activities which encouraged discussion and required group-work.

The inclusion of the social element in the motivational learning environment meant that the scope was broader than the way curricula are often envisaged in higher education. Using the cases to illustrate the elements of the environment has shown that they act in concert and tend to reinforce each other. To motivate student learning it is, therefore, necessary to take a holistic view of the teaching and learning environment which students experience.

References

Biggs, J. (1989). Approaches to the enhancement of tertiary teaching. *Higher Education Research and Development, 8*(1), 7–25.

Biggs, J., & Tang, C. (2007). *Teaching for quality learning at university* (3rd ed.). Buckingham, UK: Society for research in Higher Education and The Open University Press.

Kember, D. (2000). *Action learning and action research: Improving the quality of teaching and learning*. London: Kogan Page.

Kember, D., & Gow, L. (1991). A challenge to the anecdotal stereotype of the Asian student. *Studies in Higher Education, 16*(2), 117–128.

Kember, D., & McNaught, C. (2007). *Enhancing university teaching: lessons from research into award winning teachers*. Abingdon, Oxfordshire: Routledge.

Kember, D., et al. (2001). *Reflective teaching and learning in the health professions*. Oxford: Blackwell Science.

Lammers, L. J., & Murphy, J. J. (2002). A profile of teaching techniques used in the university classroom. *Active Learning in Higher Education, 3*(1), 54–67.

Maclellan, E. (2005). Academic achievement: The role of praise in motivating students. *Active Learning in Higher Education, 6*(3), 194–206.

Marton, F., Hounsell, D., & Entwistle, N. (Eds.). (2005). *The experience of learning: implications for teaching and studying in higher education* (3rd (Internet) ed.). Edinburgh: University of Edinburgh, Centre for Teaching, Learning and Assessment.

McKay, J., & Kember, D. (1997). Spoonfeeding leads to regurgitation: A better diet can result in more digestible learning outcomes. *Higher Education Research and Development, 16*(1), 55–67.

Prosser, M., & Trigwell, K. (1999). *Understanding learning and teaching: The experience in higher education*. Buckingham: SRHE and Open University Press.

Ramsden, P. (1992). *Learning to teach in higher education*. London: Routledge.

Richardson, J. T. E. (2000). *Researching student learning: Approaches to studying in campus-based and distance education*. Buckingham: SRHE and Open University Press.

Yan, L., & Kember, D. (2003). The influence of the curriculum and learning environment on the learning approaches of groups of students outside the classroom. *Learning Environments Research, 6*, 285–307.

Yan, L., & Kember, D. (2004a). Avoider and engager approaches by out-of-class groups: The group equivalent to individual learning approaches. *Learning and Instruction, 14*(1), 27–49.

Yan, L., & Kember, D. (2004b). Engager and avoider behavior in types of activities performed by out-of-class learning groups. *Higher Education, 48*, 419–438.

Chapter 7
Motivating Students through the Curriculum

Curriculum

The previous chapter looked at the impact of classroom teaching and learning on motivation at the level of the lesson, the individual unit or module, or the teacher. This chapter moves up a level to consider the curriculum. It, therefore, considers the design of the collection of units which together make up a degree or programme.

The chapter looks at two elements of the motivational teaching and learning environment framework which are particularly relevant to curriculum design. The first of these is allowing choice of courses to maximise interest. The second is a further consideration of establishing relevance, which is particularly important in the design of professional programmes.

There is also a major section on curriculum design for TPg courses. The TPg students were mature professionals, often studying subjects relevant to their professions. They held very clear ideas about curriculum design issues.

Allowing Choice of Courses

Interest is partly a function of individual preferences and partly a function of the quality of the teaching and curriculum design. As level of interest had quite a strong impact on level of motivation, and interests vary between students, motivation can be boosted if students have a range of courses to choose from; so that they can pick ones which they think they will find interesting.

> I prefer to take the subjects that I want rather than them being assigned. … There are some subjects that I am not interested in. However, it is set in the course so that I have to take them. (HTM01)

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The business student had made a specific programme choice when leaving secondary school to go to university. His interest was to learn more about finance instead of general business knowledge. However, there was no choice of courses for him, in the first year of study, which diminished his level of motivation.

> Every BBA student took the same subjects in the first year. I couldn't sense the difference. We only got one subject that was related to our option. … I am more interested in the core subject. I think I can learn the business knowledge from books. (BUSS01)

A related issue is courses which are restricted in application. A narrow concentration can exclude subjects which particular students might find interesting.

> Suppose that I am not interested in anything related to the front office. I would like to learn something about conventions. However, there is nothing included on conventions. What I have learned is all about the front office. Can you imagine how annoying it is? It is meaningless to me then. (HTM01)

The chemistry student chose courses so that interests could be followed. Though, he did observe that some other students were more concerned about which courses were most likely to result in good grades.

> Some students will study according to their grades, such as which subjects will enable them to obtain good grades. I think one's interest is equally important … I will choose according to my own interest. (CHEM03)

There are, though, reasons to restrict course choice. It is reasonable to argue that students should have breadth as well as depth; so restricting course choice to ensure that students learn about fundamental areas relevant to their discipline is sensible curriculum design. There are also quite legitimate reasons for restricting choice or making a basic core of courses compulsory. It is often important for students to have a sound knowledge of core constituent disciplines before they go on to specialise in their area of interest. This may not be appreciated at the time, but the value can be seen after graduation.

Curriculum design inevitably involves decisions about finding an acceptable balance between opposing tensions. In this case between providing students with a breadth of knowledge and allowing freedom of choice to maximise interest.

Resource constraints also inevitably place restrictions on the level of course choice. If the level of choice is too high, there will be a tendency for courses to become unviable due to low enrolments.

Another reason for restricting course choice relates to the final facet in the framework. The transcripts suggested that motivation was higher in classes with high levels of cooperative learning or a strong sense of belonging. Programmes with high levels of course options tend to be low on class coherence, because students can have a different group of classmates in each course they take. Ironically, programmes with little or no options have the strongest possibility of developing coherence because the same group of students spend their time together in each class.

Establishing Relevance Versus Building Theoretical Foundations

The previous chapter dealt, at some length, with the principle of establishing relevance in lessons and individual courses. Relevance is possibly even more important at the degree or curriculum level, particularly for professional programmes.

Professional Relevance

The business students' courses were able to establish relevance to the profession. Expectation were expressed in terms of the applicability of knowledge in the future professional role. This principle applied to other professional fields too. Students entering professional programmes clearly expected themselves to be prepared for their future profession and, therefore, expected their courses to be relevant to this need. This was a way in which career expectations could be used as a strong positive motivational influence.

> This course will provide me some understanding on the real business world. I have to learn the operational procedures in the business field. I expect the knowledge I learn here can be used at work in this sense. (BUSS01)

Teachers of professional programmes, therefore, had an opportunity to motivate their students through showing how what was taught could be relevant to a future career in the professional field. When theory was taught there could be an opportunity to establish its relevance by showing how it could be applied in practice by professionals in the field.

This opportunity, however, provided a double-edged sword effect. Students expected professional programmes to prepare them for a career in the profession. If they could not see how material taught in a programme served that purpose, they could easily lose motivation.

Building Block Curriculum

The antithesis of establishing relevance was teaching abstract theory. This seemed to happen all too often, because the most common curriculum design model seemed to be the traditional building block design in which the initial parts of a programme are dedicated to basic theory. This often includes subjects other than that of the subject major. These may be essential pre-requisite knowledge related to the major, but if relevance is not established students do not realise this. This seemed to be the case all too often as the subjects were usually taught as pure theory by specialists in the area without making an attempt to show relevance to the major.

The building block curriculum seemed to be particularly problematic in professional programmes. Students often selected these to escape from the pure subjects studies at school, yet found that much of the initial part of their curriculum consisted of theoretical subjects which in their view did not clearly relate to the professional field they had chosen. The dilemma was not helped by many students in professional programmes having remarkably limited ideas about their intended profession.

There were some suggestions and examples of curriculum designs which could alleviate the problem. Students found it valuable if there was an initial course which provided a road-map showing how constituent knowledge taught in early courses was utilised in later ones. In professional programmes, there was value in having an early period of exposure to professional practice. In these periods the students acted largely as an observer to learn what professionals in the field did and the sorts of knowledge needed to be an effective professional.

Lack of Relevance of Community College Curriculum

Substantial proportions of associate degrees, offered by the community colleges, were dedicated to general education. The nature of the curriculum, therefore, seems to make them more suitable as a stepping stone to a degree than as a terminal vocational award.

> This programme is too broad in some sense. We have to work with a wide range of topics or aspects. I think it is necessary to narrow the scope into certain specific streams that we can develop further. (CCB02)

> I think general education courses are also important but I think the proportion of their credits can be reduced. Taking Chinese, English and mathematics are important particularly in Chinese, if you don't have a good Chinese background, you can't move on to reading elite materials from the area of Chinese medicine. But I think the number of credits can be reduced such as from 3 to 2 credits. (CCC03)

This section should not be interpreted as implying that general education is always problematic from a motivational standpoint. The above quotation was typical of the reaction of community college students to their general education courses. The problem was the design or content of the courses, rather than general education per se. The bulk of the general education consisted of Chinese, English and mathematics. These were subjects which students had been taking ever since kindergarten; and most students were heartily sick of them. The examinations at the end of secondary schooling contained a significant component of the three subjects. The students had not performed well enough in these examinations to obtain a place in one of the UGC-funded universities. This can hardly have enhanced their motivation to study yet more of these subjects, even if it could be argued that their performance in them needed improving.

Curriculum Issues for Taught Postgraduate Students

Students enrolled in the TPg programmes to acquire advanced specialist skills of a relatively narrow field within a profession or discipline. The students could typically be characterised as mature students, commonly working within the field of study, with the majority being part-time. In Hong Kong most undergraduate students are full-time and have recently left high school.

In interviews, the TPg students were able to clearly articulate the type of advanced specialist knowledge and skills they expected to acquire through the programme. They could, and did, comment on whether the curriculum and content enabled them to develop the anticipated knowledge and skills. Their teachers were expected to possess relevant expertise and to design a curriculum appropriate for the field of specialisation. As the students were so articulate in dealing with curriculum development issues, it seems appropriate to include a substantial section which examines the design of TPg courses, particularly since there are clearly distinct considerations which apply to TPg awards.

Curriculum

As the students were fully conversant with the specialised knowledge they expected to acquire from the programme, they were able to suggest a curriculum design appropriate for their needs.

> This programme is about language studies. I am interested in the topics of language in societies, the methods for helping school students improve their writing skills, new trends of curriculum development etc. I expected the programme to benefit my work. I also wanted to improve my language abilities by attending the programme. Moreover, the education system in Hong Kong is undergoing the 3-3-4 reform. Instead of seeing it from the point of view of a school teacher, I wanted to view the change from a different perspective. (AL01)

If the curriculum did not live up to expectations, the interviewees commented critically to the interviewer.

> The lecturers were not well-prepared for their teaching. Some of them had no experience and expertise in this area. The course content does not match its description in the introduction leaflet of the programme. The content delivered to the students was completely irrelevant to the topic on teaching Chinese as a foreign language. I am very disappointed with it. The core courses focused on issues of teaching school students. Only one lecturer included content that was relevant to the topic of the programme. (CH02)

Knowledge/Content

There were also expectations about knowledge taught. The student quoted below expected up-to-date knowledge and would presumably be able to distinguish outdated information.

> I need to upgrade and update my IT knowledge. IT is an ever-changing industry or subject matter. I graduated from [university] more than 10 years ago. At that time, I was learning the most updated IT knowledge. But what I had learned is outdated now so it is necessary to keep refreshing. (IE01)

Again a failure to meet expectations over content drew criticism. In this case the student wanted practical examples relevant to his/her work in the field. The university lecturers presented theory without relevant practical applications.

> The content could be more practical. The courses seemed to be designed to include practical elements. But no practical experiences were shared with us. … There were no practical examples to support the theories. (AL01)

Skills

Some students specified skills they thought would be useful to their careers. It might be noted that in Hong Kong graduates can be employed as teachers without a teaching qualification, as long as they enrol in a part-time PGDE shortly after starting employment.

> I expect to learn more about teaching pedagogies and how to handle students effectively. Basically, I am sure I will learn more about Liberal Studies. In the meantime, I really want to learn how to tackle different student problems upon different aspects such as psychologically. I expect to learn something that is beyond the teaching content but how to teach. (LS02)

Once again the quotation giving negative evidence complains of a lack of practical application.

> I expected to learn teaching methods. But I mainly learned on my own. A lot of content was not covered in the curriculum and I had to read books on my own. For example, we were provided with an example of lesson plans. But the details of the lesson plan, such as the aims and objectives, were not explained. I consider preparing a lesson plan very important. But the lecturer just explained it briefly in 5 min. I have to rely on self-learning. (EN01)

Outcomes

If it is accepted that TPg programmes are mainly for in-depth study of an advanced specialisation, it follows that the range of relevant outcomes or graduate attributes may be narrower than that usually listed for undergraduate degrees these days. Birenbaum (1996) has suggested a category scheme for attributes of cognitive, social and values. Of these categories, some attributes of the latter two may be less relevant for TPg awards. The mature TPg students may also have developed the attributes already.

It is also noteworthy that TPg awards are commonly self-financing or revenue-raising. In which case, students can expect the curriculum to focus on the specialisation relevant to the award. The inclusion of broadening elements designed to nurture graduate attributes may make enrolment less attractive.

Conclusion

Curriculum development is clearly important for motivation. Relevance is the most significant element of the motivation learning and teaching framework for curriculum design, particularly for TPg students. It will affect initial motivation to enrol. The TPg students were mature professionals; so knew what they expected to gain from enrolling in a programme.

Some of the TPg students, though, were disappointed that the courses they had picked did not live up to their expectations or the promises in course outlines through the lack of practical application to their professional needs. There is often a tension between the university lecturers' desire to stress the importance of theory with the TPg students' desire for practical application relating to their professional needs. The ideal is a curriculum design which includes the theory and the application of that theory. Many lecturers find this difficult as staff recruited to professional faculties increasingly lack significant professional experience.

Reference

Birenbaum, M. (1996). Assessment 2000: Towards a pluralistic approach to assessment. In M. Birenbaum & F. J. R. C. Dochy (Eds.), *Alternatives in assessment of achievements, learning processes and prior knowledge* (pp. 3–30). Boston: Kluwer.

Chapter 8
Systemic Issues

The University Grants Council of Hong Kong (UGC) provides a substantial portion of the funding for seven universities and a teachers training institute. Only about 17 % of an age group gain entry to one of the seven universities funded by the UGC (University Grants Council of Hong Kong 2006). With the traditional respect for education shown by Confucian societies (Kember and Watkins 2010; Lee 1996) this means that each year a substantial proportion of an age group are frustrated in their desire to gain a place in one of the UGC-funded universities. Until very recently the higher education system of Hong Kong could be classified as elitist, and indeed, depending on what is classified as higher education, it could well be argued that it remains so. Each year there are a substantial body of potential students frustrated by their inability to gain a place at a traditional university who believe that it is distinctly elitist.

Economic advancement through education is an important ideal in Hong Kong. A common aspiration is for families to advance in level of education generation by generation. Parents and grandparents make sacrifices so that children can receive a better education than they did. It can, therefore, become both a motivation and an obligation for a child to study hard and proceed to a higher level of education than their parents. Western universities have tended to be under-represented in students whose parents did not have a university education. Whereas in Hong Kong this is not necessarily a social barrier, but can in fact provide an incentive.

Until recently the principal options open to those unable to obtain a place at a UGC-funded university, if they wanted to obtain a degree, were to study abroad or to enrol with the Open University of Hong Kong (OUHK). The OUHK was founded by the Hong Kong Government, but required to operate on a self-funding basis. It offers open-entry degree programmes through distance education. Overseas universities also offered distance education courses in Hong Kong, but there was limited provision for the completion of undergraduate degrees.

Hong Kong has recognised the need to make the transition from elite to mass post-secondary education. The Government has recognised that an elite system of post-secondary education does not provide a sufficiently well educated workforce for the economy to convert from manufacturing to one which is knowledge-based. Basic manufacturing has largely moved from Hong Kong to the mainland to take advantage of lower wage rates.

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In an attempt to cater for the very substantial numbers who are unable to gain a place in one of these universities, but desire entry to higher education, the Government has encouraged the development of a community college sector. The community colleges operate on a self-financing basis; so can be equated to the private higher education sector in the rest of the world. There is also a parallel to the need for universities and colleges worldwide to look to sources other than governments for ever increasing proportions of revenue to fund increases in student numbers. The Hong Kong community college sector can, therefore, be regarded as a valuable case study for the growth of higher education in other parts of the world. Governments have desired an expansion of higher education, but have been unwilling to provide per capita funding at the level when universities catered for an elite. In most countries universities have, therefore, had to turn to funding sources besides the government and in others this has resulted in the emergence of a private higher education sector. The issues and problems faced by the community colleges in taking Hong Kong from elite to mass higher education, are therefore highly pertinent to other jurisdictions.

Development of Additional Post-Secondary Sector

As in many other places, the expansion of the intake to higher education in Hong Kong has come through establishing greater diversity in the sector, with a significant segment responsive to market demands, implying lower costs and standards, in terms of the way universities have traditionally been assessed (Kaiser and de Weert 1994; Trow 1973). In Hong Kong the expansion has been brought about by the Government encouraging organisations to offer places on a self-financing basis. These organisations include (Education Commission 1999):

- UGC-funded universities
- Private universities
- The Open University
- Post-secondary colleges, including community colleges
- Continuing education providers.

The expanded provision has seen the involvement of each of these types of organisation in various ways and often in combination. For example, many of the community colleges have been founded by the continuing education arms of the UGC-funded universities, sometimes in combination with other bodies, such as charitable foundations. As the colleges operate on a self-funding basis, this could also be seen as the involvement of private universities. For convenience this diverse new post-secondary sector will be referred to as ‘community colleges’ in this chapter, as indeed they have been throughout the book.

The OUHK continues to offer its open-entry degrees through distance education, though these have proved increasing unpopular when in competition with

face-to-face courses offered by community colleges (Kember 2007). In the face of this downturn in distance education the OUHK has also started a community college with face-to-face teaching.

Community Colleges

The major expansion has come through the formation of community colleges. The community colleges have mostly been formed by a mix or combination of charitable foundations and the universities' continuing education arms. The universities have been happy to let their names be associated with community colleges as they are seen to be making a positive contribution to the Government's push to enlarge higher education. However, the legislative framework of the organisations makes it clear that the associate degrees are not awards of the parent universities; so staff and students are affiliated to the community college and not the parent university. Community college data, therefore, does not feature in the universities research assessment or ranking exercises.

This has effectively created a two-tier higher education system. The UGC-funded universities comprise the elite upper tier. The community colleges and the like make up the second tier. As will be seen as the chapter unfolds, there is a marked gap between the two tiers.

The term *community college* is normally associated with the USA. Community colleges in the USA provide an opportunity for students to enter higher education, while remaining in their local community. They, therefore, tend to be smaller than the four-year colleges, which normally provide on-campus accommodation for a substantial proportion of students. In this respect there is little parallel with Hong Kong as there is limited evidence of students selecting community colleges because of proximity to their homes. The small size and highly urbanised nature of Hong Kong means that there is less sense of local communities compared to the USA.

The antecedents of the community colleges in Hong Kong can be traced back to a substantial range of sub-degree programmes offered by two polytechnics (which have now become universities). In the process of converting from polytechnics to universities, the UGC mandated a rise in the proportion of degrees offered and a decrease in sub-degrees. The provision of sub-degrees was taken over by vocational colleges and by the continuing education arms of the universities. The process served as a model for the community colleges offering associate degrees.

Interestingly, students enrolling in the community colleges seem to be influenced in selecting a particular college and course by the prestige of the parent university, even though the awards are clearly not those of the university itself.

> Since [university] ranks the second in Hong Kong, its status is higher than other universities, even higher than [other university]. (CCB02)

The community colleges offer associate degrees to those who have completed secondary school. Associate degrees take two years of full-time study. Those

enrolling have usually been unable to gain a place in the UGC-funded universities, and usually enrol straight after finishing school. Higher diplomas, also of two years duration, continue to be offered by a mix of providers. Sub-degree programmes which used to be funded by the UGC have been required to become self-financing.

From Elite to Mass Higher Education

Universities traditionally educated an elite minority of the population. They were visualised as centres of excellence catering for a privileged upper class. While basic manufacturing and agriculture were the major economic activities, only a small proportion of the workforce needed to be highly educated.

Social equity was an obvious pressure for increasing the proportion of the population with a university education. Trow (1973), one of the early writers on the transition from elite to mass higher education, defined the mass higher education threshold as 15 % of an age group. This level of participation reflects early concerns that entry to higher education should be expanded to promote social equality.

After the second world war, governments also realised that they needed more graduates, particularly scientists, for their industry to remain competitive. As basic manufacturing has moved away from Western countries in search of cheaper labour in developing countries, the economic concern of having a labour force capable of functioning in a knowledge-based economy has raised the desired participation threshold. Trow (2006) more recently suggested that participations in the range of 15 to 50 % of an age-group be treated as mass higher education, while higher levels be regarded as universal higher education. However, this terminology does not seem to have found wide acceptance. It is now common for developed countries to have higher education participation targets in the region of 50 %, but the term mass higher education normally seems to be used for such an objective. Some Asian countries, like Japan, South Korea, Taiwan (Hayhoe 1995) and China (Mok 2009) have expanded more rapidly than Western countries, but seemingly not as quickly as Hong Kong's recent expansion.

The cost comparison is also striking. As the Hong Kong government has made a policy decision that the expansion should be on a self-financing basis, the cost to the Government and the taxpayer has been limited. In the West, by contrast, the costs to governments have been substantial, even if the expenditure per student has progressively declined.

To cater for the demand, the Government planned to expand the number of places in post-secondary education so that 'Within ten years, 60 % of our secondary school graduates will have opportunities to receive higher education' (Education and Manpower Bureau 2001, p. 14). The Education Commission (1999, p. 18) had gone even further by aiming to 'provide opportunities for everyone who aspires to higher education to attend programmes appropriate to their abilities'.

The post-secondary sector has seen a phenomenal rise in the number of participants. Young (2005) reported that 53 % of the age group was participating in

higher education in 2004. This means that Hong Kong has effectively achieved mass higher education as the threshold is commonly recognised as 50 % participation. There has been a further increase in enrolments since this time; such that in 2005 the participation rate was 66 %, though there has now been a levelling off. The Government's target of 60 % participation (Education and Manpower Bureau 2001, p. 14) has, therefore, been met.

Although the expansion has been so rapid and there had been a large unsatisfied demand for higher education, there has been considerable dissatisfaction with the nature of the increased places in Hong Kong. Rather than satisfying the demand for higher education, the expansion has fuelled an increased desire as students have seen the newly offered places in shorter courses as a potential step to gaining entry to a traditional undergraduate degree, rather than an end in themselves. The Government might have been expected to receive praise for such a rapid and substantial increase in provision at little cost to the taxpayer, but has instead been criticised for being unable to meet demand from graduates of the new shorter offerings for places in the traditional universities.

Retention of Elite UGC-Funded Universities

Trow (2006) argued that higher education systems could expand until they catered for about 15 % of an age-group without fundamentally changing their character, but significant changes beyond this point needed transformation. Hong Kong has chosen to do this by keeping the elite UGC-funded universities largely as is, providing undergraduate education for top performing secondary school students.

The irony of the move to mass higher education is, therefore, the reinforcement of the UGC-funded universities as elitist. There has been little change to the number of undergraduate places and the substantial majority of these still go to the top performers in secondary school examinations. The elitist position has been reinforced by efforts by the universities, backed by the UGC, to strengthen reputations internationally. The obsession with university ranking tables is at least as strong in Hong Kong as it is elsewhere. The factors used to determine rankings tend to favour universities catering for an elite, rather than those contributing to broadening the entry to higher education.

Facilities

The universities' continuing education arms commonly rent teaching space in commercial buildings. Other space in the buildings serves as a shopping mall or office block. Most of the community colleges started in premises like this. Classrooms could be on floors shared with shops and offices.

> When you visit our bathroom, you can see the toilets being occupied all the time. There are not enough toilets but we have to share with other tenants. We have hundreds of students. (CCA01)

Most of the community colleges have now built dedicated buildings in the form of tower blocks, though often with limited area per floor. Essentially all campus facilities are housed within one tower block.

> We don't have a large campus like universities. We are being isolated and have to be self-reliant. For group discussion, we have to do it outside such as getting a place in the food court of [a shopping mall]. (CCA01)

> We had a very small campus, I tried to find a place to sit and read but I couldn't. I checked on every flight but could find none because all seats were occupied. (CCB01)

The self-financing nature of the community colleges means that facilities are kept to the essential minimum. Facilities like libraries and study space are particularly significant in Hong Kong as most apartments are small; so space to study at home is limited.

> We need more space so that we can have a bigger common room. It is overcrowded all the time. Besides, I think it is inappropriate to have a school at the current location. We have insufficient resources such as books. I don't think it is possible for us to go to the [university] to borrow books. It's difficult. The nearest public library at […] is small. (CCA02)

Staff are employed in a teaching only capacity, with no expectations of research being conducted and no facilities to do so. Contact hours and student-staff ratios tend to be high compared to the UGC-funded universities.

> More staff should be added to every unit of the school. For example, the social work unit needs more staff. It is difficult for them to serve such a huge group of students with limited staff. In short, we need more resources and space. (CCA04)

> Several teachers have to teach for two or three subjects. Frankly, we do not have many teachers. I think there are 3-4 permanent teachers in [branch of college] and they are overloaded obviously. (CCA02)

Is This Really Higher Education?

While the Government might claim that mass higher education has been achieved, many do not accept the new provision as constituting higher education. The literature may note that moves towards mass higher education require fuzzy boundaries (Scott 1995) and new types of provision (Kaiser and de Weert 1994; Trow 1973), but the Hong Kong population has been reluctant to embrace this degree of fuzziness.

Establishing the extent to which expansions towards mass post-secondary education are achieved through the introduction of shorter courses is complicated by

determinations of what is included in higher education. Scott (1995) notes that elite systems have clearly demarcated boundaries, whereas mass systems are characterised by fuzziness and permeability. As explained above, the expansion in Hong Kong has been accompanied by a greater number and diversity of providers. A large part of this new provision is offering shorter awards, mostly two year associate degrees. As there is a move to four year undergraduate degrees, this will mean that, in terms of the duration of awards, Hong Kong is adapting an American style four year/two year college system. The trend towards shorter programmes has not been common in British Commonwealth countries. In Asia, Taiwan has seen a significant growth in those taking short programmes (Wang 2003), but in Japan and South Korea the proportions on shorter programmes are little above 20 % (Hayhoe 1995).

Private Funding

The expansion in Hong Kong has come about through the rapid development of privately funded higher education providers, as the Government has insisted that the expansion in participation should be on a self-financing basis. Numbers in UGC-funded undergraduate courses have changed little and enrolments in UGC-funded sub-degree courses have declined markedly as funding for them has been largely discontinued. This is in contrast to the UK and most developed Commonwealth countries where the bulk of the expansion has occurred through the existing government-regulated university system.

Funding for these expansions has come through students bearing a greater part of the cost of their education through fees and by universities being forced to either operate at lower per capita funding levels and/or raise funds through means such as donations and recruiting overseas students. By contrast, the USA has a more devolved and diverse higher education system, so there has been a greater contribution to the move to mass higher education by the private sector. The increased contribution of the private sector has also been seen in other Asian countries, with enrolments in private institutions exceeding 70 % in Japan, South Korea and Taiwan (Hayhoe 1995; Wang 2003).

While private funding may not be an appropriate descriptor for higher education in China, Mok (2003, 2009) argues that China has moved away from a centralised or state dominated model. A policy of decentralisation has meant that local governments have greater autonomy and flexibility. This has resulted in greater diversity and increased provision, particularly in the socio-economically prosperous regions.

Employability

Employability was becoming a major issue for the higher education sector in Hong Kong. Firstly there had been a huge expansion in a very short space of time. Secondly, most of the expansion has occurred through enrolment in associate degrees. At present the value of this as a terminal award seems to be questionable to both students and employers. Students are enrolled into associate degrees in vocational streams, but they do not seem to be designed as vocational awards. An associate degree in nursing was recently refused accreditation by the Nursing Council.

> I think those courses learned in the first year were unnecessary. It seems that they are not that relevant to real estate. I would rather to have more courses directly relating to real estate. (CCF02)

Substantial proportions of associate degrees are dedicated to general education. The nature of the curriculum, therefore, seems to make them more suitable as a stepping stone to a degree than as a terminal vocational award.

> This programme is too broad in some sense. We have to work with a wide range of topics or aspects. I think it is necessary to narrow the scope into certain specific streams that we can develop further. (CCC04)

> I think general education courses are also important but I think the proportion of their credits can be reduced. Taking Chinese, English and Mathematics are important particularly in Chinese, if you don't have a good Chinese background, you can't move on to reading elite materials from the area of Chinese medicine. But I think the number of credits can be reduced such as from 3 to 2 credits. (CCB01)

Associate degrees are meant to be suitable as terminal vocational qualifications, though their value as an employment credential has been questioned. If it does not become accepted as a qualification which leads to desirable employment and there are difficulties with articulation to undergraduate degrees, there is a danger that the qualification could become visualised as an expensive route to nowhere.

Motivation of Students After Massification of Higher Education

The remainder of this chapter will consider the wider implications of the systemic changes to higher education in Hong Kong. It is instructive to do this for two main reasons. Firstly, the expansion has been so rapid. With the gradual change elsewhere it can often be less easy to discern what exactly has happened. Secondly, by retaining an elite university system and introducing a second tier of community colleges, it is possible to compare the two. For countries which have retained a one tier system, this is useful as it means that at the one point in time it is possible to

compare what they used to be (an elite system) with what they have become (mass higher education).

There has been a worldwide trend for higher education to expand. Governments have recognised the need for economies to become knowledge-based, which implies a more highly educated workforce.

In past it was more difficult to get into university and I suspect it, therefore, meant more when you did. When I won a place to go to university in the late 1960s, it was considered a real achievement. Going to university and graduating could make a real difference to your life. If I had not gone to university I would probably have been consigned to a role in life similar to my father. He spent his life in clerical roles with British Rail and lived his whole life in the UK. By contrast, I have had a successful academic career, which has seen me working in five countries.

While I did not at the time realise what university would lead to, it was clear that there was great incentive to do well at school to get into university. Just having the chance to get out of the family home and head off to a life of independence was an enticement, particularly since we received grants to be students at the time.

It seems reasonable to assume that an impact of the very substantial increase in the entry to higher education must be that a significant proportion of the intake will display lower levels of motivation at both school and university. Motivation is hard to measure or quantify; so it is hard to provide evidence for the assertion. However, I suspect that few will question it, as most in higher education will have heard many anecdotal claims in support and most will have observed symptoms consistent with the claim.

In terms of the overall motivational framework, introduced in Chap. 2, individual goals are likely to be set at lower levels at school. When students know that about half of an age group get into university, goals can be set at lower levels than if entry is confined to an elite. It is likely that the habit of setting goals at a relatively low level then translates to university study, particularly if students find themselves in an environment when others around them display signs of goals set at limited levels. The framework is dynamic and contextual; so the influence of others is significant.

The relatively low levels of the goals students set will be linked to compliance thresholds which are on the low side. Again the tendency will start at school and carry forward to university. If students realise at school that they can succeed without doing enormous amounts of homework, they become conditioned to lower compliance thresholds than those for previous generations. As the compliance thresholds are a function of habit, pressure and conditioning, they will tend to be carried forward to university.

The impact of the expanded intake to higher education has been the subject of considerable debate. Many have commented on the abilities of the expanded intake to higher education. A good example in Australia is the suggestion that the Government might consider restricting entry to teacher training courses to those with results from their secondary school assessments in the top 30 % of a cohort. The argument being that their ability will limit their chances of being able to

complete a degree and qualify as a teacher. Perhaps more significantly, if they do qualify as a teacher their level of understanding of the subjects they have to teach will limit their effectiveness as a teacher.

It is notable that the public debate about the levels of admission to higher education has concentrated on the ability of those gaining admission through the expanded intake. There have no doubt been anecdotal discussions about levels of motivation, but less in the public domain. Possibly this is because motivation, particularly in higher education, has not had an adequate conceptual framework to facilitate discussion. There has certainly been no readily available measure of motivation with wide acceptance. This contrasts with the tertiary entrance scores, which are accepted as measures of ability.

The discussion in this section is definitely not an argument in favour of returning to elite entry into higher education. Governments are undoubtedly right that knowledge-based economies need a well-educated workforce. Having a large proportion of the population with a tertiary education must also be seen as a highly justifiable social advance.

However, it does seem to make sense to consider how far the expansion of higher education should be taken. The discussion of the issues arising from the very substantial and very rapid expansion of higher education in Hong Kong has revealed a number of impacts upon motivation to enter higher education and to study effectively while there. These issues also have been or are becoming of concern elsewhere, but the slower growth in higher education has, in some cases, made their impact less notable.

Mature Entry

When the Open University (OU) started in the United Kingdom, its policy of open entry was considered radical at the time. As there were only enough places at other universities for a limited proportion of an age group, they restricted entry to the top performers in the A level examinations. There was, though, a highly significant restriction on open access. It was only for mature students; most students admitted to the OU were in the 35 to 45 age range (Kember 2007).

School leavers who had missed out on entry to other universities because their A level results were not good enough could not enrol at the OU straight after leaving school. There was a pilot scheme in which unemployed school leavers were enrolled in OU courses. However, the pilot scheme was not considered sufficiently successful for it to be continued beyond the limited trial period (Kember 2007).

It is instructive to consider the distinction between school leavers who failed to gain entry to university and mature entrants to the OU from the lens of the conceptual framework. The most interesting aspect of the analysis is that the mature entrants were, in the main, among those who failed to obtain good enough grades at school to win a place at university. At school they might have lost interest in most subjects, often because the teaching did little to motivate them. Like most school

students they probably had little idea of what they wanted to do on leaving school; so would have been placed low on the career facet of the motivation framework. As the facets reinforce each other, they probably had quite low level goals.

Yet some years later they were sufficiently motivated to apply to take a degree through an open entry programme. By this time they would have been employed for several years and many would have families to support. Returning to study at a mature age takes a lot of commitment, particularly since the employment and family commitments meant that part-time study was normally the only realistic option.

This dramatic change in the level and nature of motivation provides support for the dynamic and contextual nature of the motivational framework. After being in employment for some time, the career facet of the framework can be at a high level. The need for a degree to enhance career prospects can become apparent. There can also be a realisation that university courses can provide necessary knowledge and skills. The interest facet can in turn be enhanced, as long as the curriculum is well designed with relevant material. As the facets of the framework influence each other, the goals should now be set at a high level—much higher than on leaving school.

Employability

Many countries have experienced graduate unemployment and/or under-employment following expansions in the number of university graduates. Pearson (2006) estimated that only half of the UK's 2003 graduates went into traditional graduate jobs, with one in six going into associate professional and technical positions and one third into lower level jobs. These observations, however, were couched with riders that traditional non-graduate jobs often now required higher skill levels and employers sought graduates to fill them. Further, past data suggested that by seven years after graduation, half of those who started in traditionally non-graduate jobs would have moved into traditional graduate occupations.

Qualification Inflation

Developed countries have experienced qualification inflation. As the numbers with undergraduate degrees has increased markedly, there has been an upsurge in the number of graduates seeking jobs. Employers have taken advantage of the situation by demanding higher qualifications than previously. Graduates keen to find employment have applied for positions which did not require degrees.

There has also been a substantial upsurge in the numbers taking TPg awards (see Chap. 3). The structure of professional preparation is increasingly being visualised

as an undergraduate degree followed by a taught masters; a trend which has been formalised by the Bologna accord.

Most developed countries have reached levels of enrolment equated to mass higher education. It will be interesting to see whether the expansion of higher education continues. In Australia the level of entry to higher education is now largely determined by the numbers willing to pay tuition fees. If the rewards of completing a degree are graduate unemployment and a large loan to pay off; this presumably must have an impact on motivation to enrol in higher education.

Vocational Education

A side effect of the expansion of higher education is that it has come at the expense of vocational qualifications. Australia, for example, currently faces a shortage of tradespeople like chefs, hospital workers and building tradespeople, because school leavers have found the prospect of a university degree more attractive than an apprenticeship and/or a vocational training.

If economic returns start to affect levels of motivation for entering higher education, it could be interesting to speculate whether there will be a resurgence of interest in vocational training. If graduate numbers continue to grow, graduate salaries are likely to become less attractive, particularly when compared to the cost of obtaining a degree. A shortage of tradespeople should see their salaries rise. If the economic law of supply and demand operates, there might be a shift back from higher to vocational education.

Quality of Universities and University Experience

As well as impacting upon students, the expansion of higher education has also had a major effect on universities. Governments have asked universities to take in more students, but been unwilling or unable to provide funds for the expansion at previous per capita rates. Universities have, therefore, had to find funding from other sources and find ways to operate with lower expenditure per student.

In Hong Kong the expansion of higher education took place through the formation of a new second tier of community colleges. These are required to operate on a self-funding basis; so can be classified as private institutions. Forming a second tier of community colleges and introducing private institutions into the higher education mix follows the US tradition. The diversified US higher education system has a blend of private colleges and ones established by states. Some other Asian countries have also developed a substantial private sector, as enrolments in private institutions exceed 70 % in Japan, South Korea and Taiwan (Hayhoe 1995; Wang 2003).

Most Commonwealth countries have followed the UK system of a unified higher education system. While these are still regulated by the state, the claim that they are state-funded is becoming tenuous. I have referred to seven universities in Hong Kong as being UGC-funded. The two most prestigious of these, though, had a finance mix of roughly one third each from donations, tuition fees and the UGC or government.

Of so called state-funded universities, the proportion of funds actually received from the state will vary considerably between countries and between institutions within a country. There cannot be many, though, which do not raise a significant proportion of their funding from sources other than the government. The need to raise a significant part of their operating finance, while at the same time having to cope with expanded intakes, has undoubtedly had a significant impact on universities.

In Hong Kong, the expansion was achieved by the creation of the lower tier community colleges. The section headed 'Facilities', earlier in this chapter, makes it clear that these colleges are very different to UGC-funded universities. The student experience differs markedly between the universities and the colleges. The information from the interviews in this chapter and earlier ones clearly shows the impact of this on motivation of students in the two types of institution.

In Hong Kong the Government has chosen to maintain the levels of funding in the original UGC-funded universities by aiding the establishment of a second tier, to which it has made negligible funding contributions. In Commonwealth countries which have retained a unified system, the financial impact has been spread across the system.

However, the impact has been greater on newer, less prestigious and more lowly ranked universities. The older more prestigious universities tend to start with better resources and more endowments. More importantly, they have considerable advantages when it comes to raising funding. Their degrees have a better reputation; so it is easier to attract students and their tuition fees. If the system permits, they can charge higher fees. Alumni are the greatest source of donations and the older universities tend to have more and richer alumni; so receive more in donations from them. Other donors, such as foundations, also seem to be attracted to more prestigious universities, particularly if their name becomes attached to a building, facility or scholarship. Their academics tend to have the best records in winning grants.

The rich therefore become richer, or perhaps more realistically, are less adversely affected by funding cuts. The unified systems in the UK and Australia have not broken down into two tier systems, like that in Hong Kong. However, there has been marked widening of perceived quality between the top and bottom ranked universities. The UK external examiner system was meant to ensure that a 1st class degree in a particular discipline was of the same quality regardless of the university. This claim no longer has any credibility.

Conclusion

By moving to a two tier system, Hong Kong provides a contrast between an elite university system and one consistent with mass higher education operated at little cost to the government. As such it might help those in other jurisdictions to visualise where they have come from and the direction in which they are likely to be heading.

The effect on motivation of students of this change was examined very closely in Chap. 4. Examples from the undergraduate sample were used to illustrate the positive end of the continua in the motivational orientation framework. Quotations from the community college students were used to interpret the negative end. The quotations chosen were representative of the levels of motivation of the two groups of students. The earlier parts of this chapter have also presented negative feedback about the community colleges.

When there is such a contrast between positive motivational outcomes being associated with the elite system and the negative end of the spectrum being associated with the community colleges, it is hard to escape the conclusion that cut price education means poor quality outcomes. Part of the explanation for the differences in motivational levels between the undergraduate and community college samples lies in the UGC-funded sector being able to recruit an elite group of students. However, the models underpinning this book are relational and contextual. The quality of the education offered in the two types of establishment has a major impact on motivational outcomes.

As higher education expands, and governments are unable to maintain levels of per-capita funding, the gap, in the quality of offerings and outcomes, between the top-ranked universities and the run of the mill providers will inevitably widen. Deregulation of fees, which has been introduced in the UK and is being contemplated in Australia, can only exacerbate the divide.

References

Education and Manpower Bureau. (2001). *Learning for life: Learning through life*. Hong Kong: Education and Manpower Bureau.

Education Commission (1999). *Learning for life*. Hong Kong Special Administrative Region: Education Commission.

Hayhoe, R. (1995). An Asian multiversity? Comparative reflections on the transition to mass higher education in East Asia. *Comparative Education Review, 39*(3), 299–321.

Kaiser, F. & de Weert, E. (1994). Access policies and mass higher education. In L. Goedegebuure & F. Van Vught (eds.) Comparative policy studies in higher education. *Utrecht*: Center of Higher Education Policy Studies.

Kember, D. (2007). *Reconsidering open and distance learning in the developing world: Meeting students' learning needs*. Abingdon, Oxfordshire: Routledge.

Kember, D., & Watkins, D. (2010). Approaches to learning and teaching by the Chinese. In M. H. Bond (Ed.), *The second Oxford handbook of Chinese psychology*. Oxford: Oxford University Press.

Lee, W. O. (1996). The cultural context for Chinese learners: Conceptions of learning in the Confucian tradition. In D. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences*. Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Mok, K. H. (2003). Globalisation and higher education restructuring in Hong Kong, Taiwan and mainland China. *Higher Education Research and Development, 22*(2), 117–129.

Mok, K. H. (2009). Globalisation and higher education restructuring in Hong Kong, Taiwan and mainland China. In M. Tight, K. H. Mok, J. Huisman, & C. Morphew (Eds.), *Routledge international handbook of higher education*. Abingdon, Oxfordshire: Routledge.

Pearson, R. (2006). The demise of the graduate labour market. In I. McNay (Ed.), *Beyond mass higher education*. Maidenhead: Society for Research into Higher Education and Open University Press.

Scott, P. (1995). *The meanings of mass higher education*. Buckingham: Society for Research into Higher Education and Open University Press.

Trow, M. (1973). *Problems in the transition from elite to mass higher education*. Berkeley: Carnegie Commission on Higher Education.

Trow, M. (2006). Reflections on the transition from elite to mass to universal access: forms and phases of higher education in modern societies since WWII. In J. J. F. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (pp. 243–280). Netherlands: Springer.

University Grants Council of Hong Kong. (2006). *Facts and figures 2005*. Hong Kong: University Grants Committee Secretariat. Retrieved from http://www.ugc.edu.hk/english/documents/figures/.

Wang, R. J. (2003). *From elitism to mass higher education in Taiwan*: The problems faced. *Higher Education, 46*, 261–287.

Young, E. C. M. (2005). *Chairman's report 2003-2004*. Hong Kong: The Federation for Continuing Education in Tertiary Institutions.

Chapter 9
Cultural and Motivational Issues Concerning the Performance of Chinese Students

International Comparisons

The data from the three studies were gathered in Hong Kong, whereas most of the research informing the motivation literature has taken place in Western countries. The work introduced in the book is, therefore, highly relevant to one of the major current issues in education; why are students from Asia outperforming those from major Western countries?

The way I have posed this issue in the opening paragraph is the way it is commonly portrayed; as a reference to Asian students. The title of the chapter, though, refers to Chinese students. There are two reasons for this. Firstly, as is shown in the next few paragraphs, it is predominantly Chinese or Confucian-heritage students who have been the outstanding performers in the international comparisons. If the high performance is attributed to a region, it would be more appropriate to refer to East Asia, rather than Asia as a whole. Secondly, the research data I have drawn upon and analysed in this book is all of Chinese students. Furthermore there is also a substantial body of relevant research into the approaches to learning of Hong Kong and Chinese students which yields relevant insights. In addition there is a whole genre of research into the psychology of the Chinese, as evidenced by two substantial compilations edited by Bond (1996, 2010). By contrast, there is less research into approaches to learning or educational psychology for the rest of Asia.

The most convincing and most highly cited evidence of high performance by Asian students comes from the international comparisons organised by the Organisation for Economic Co-operation and Development (OECD) known as the Programme of International Student Assessment (PISA). The third PISA tests, compared performance of 15-year-olds in 57 countries and regions (Organisation for Economic Co-operation and Development 2007). In science and reading two of the top four spots went to Asia, while in mathematics they filled three of the top

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four places. In the 2012 testing of 15 year-olds, the top seven places in mathematics were taken by Asian countries (OECD 2012).

These top seven countries/regions were, in order: Shanghai, China; Singapore; Hong Kong, China; Chinese Taipei; Korea; Macau, China; Japan. This is the main reason for the title of this chapter referring to Chinese students rather than to Asian learners generally. The PISA rankings suggest that the outstanding performance is predominantly a Chinese or Confucian-heritage phenomenon. If it is attributed to a region, it would be better to refer to East Asia.

The PISA data are far from the only evidence of students from Asia performing very well. The PISA comparisons were preceded by a series of studies conducted by the International Association for the Evaluation of Educational Achievement. There is sufficient evidence that extensive reviews have been conducted by Stevenson and Lee (1996) and Hau and Ho (2010).

Ambit of the Chapter

The PISA comparisons and most of the data in the reviews cited above refer to studies of school students. This book is about motivation in higher education. Nevertheless, as the performance of Asian students is such a hot topic at the moment it is appropriate to consider it here.

Another reason is that while there is unlikely to be a clear-cut explanation for the discrepancies in performance, the relevance of examining the differential in performance between East and West in this book is strengthened by the likelihood that the levels and nature of motivation seem likely to play a significant part in any explanation. Hau and Ho (2010) couple their review of evidence of superior performance of Chinese students with a comparison of the Chinese psychology research into motivation with that of the Western psychology literature. Any motivational framework derived in an Asian context must, therefore, be of significance.

It is also likely that students who perform very well at school will continue to do similarly well at university. The motivations, conditioning and contextual factors which inspired them at school are also likely to apply at university.

There is also evidence of high performance in Asian universities. The rise of Asian universities up international ranking tables provides one source of evidence. Another is the alacrity with which prestigious universities admit Asian students into their doctoral programs.

Evidence will be drawn from beyond the three studies, but the main interpretive focus will be on motivation, in keeping with the theme of the book. In particular I will draw upon research into the paradox of the Chinese learner. The paradox is highly relevant here because it tried to explain why Chinese students performed so well in international comparisons but there were widespread perceptions of them employing rote learning, which is normally associated with poor learning outcomes in the Western educational psychology literature. The research drew largely on the

SAL tradition by examining the approaches to learning of Chinese students. While it does not directly draw upon the motivational orientation framework developed in this book, approaches to learning do have a motivational component; so this seems to be within the ambit of the book.

The Paradox of the Chinese Learner

Perhaps the most commonly advanced perception of Chinese students has been that they have a greater tendency towards rote learning than their Western counterparts. The observation has been widespread in anecdotal form, but affirmations in print are also quite common. I see no point in extensively reviewing this literature as I intend to draw upon the research which suggests that it is largely a mis-perception. The following quotation, from the official minutes of a course planning committee in one of the universities in Hong Kong, is sufficient to establish how entrenched negative perceptions of Chinese students were at the time systematic investigations of the perceived phenomenon started.

> Students in Hong Kong … expect lecturers to teach them everything that they are expected to know. They have little desire to discover for themselves or avail themselves of the facilities which are available to them within the teaching institution. They wish to be spoon fed and in turn they are spoon fed. Lecturers are under pressure to feed the student with a certain amount of academic and community needs information and the simplest way to do it … is to adopt the old and traditional approaches to teaching. (Minutes of the […] Course Planning Committee 1989, p. 13)

This perception, though, has been seen as an inconsistency which has become known as the 'paradox of the Chinese learner' (Watkins and Biggs 1996). Rote learning is seen as an undesirable approach to learning, which when adopted by Western students has tended to be associated with poor learning outcomes. However, this is inconsistent with the evidence from international comparisons of students from Asia performing very well.

Research into the paradox has produced two contributing explanations.

1. Research in Hong Kong and China has uncovered evidence of a set of approaches to learning, intermediate between pure surface and deep approaches, which combine memorisation and understanding. Observations of Chinese students apparently attempting to memorise material could have been misinterpreted as rote memorisation, when in fact the memorisation was combined with attempts to reach understanding, and was therefore not a surface approach.
2. When Chinese students do employ a surface approach, it is likely to be a response to perceptions of contextual factors in the teaching and learning environment, rather than as a characteristic of a cultural group or a predominant regional trait.

Approaches to Learning

The original characterization of approaches to learning was essentially dichotomous. Marton and Säljö (1976) claimed that when students were asked to read an academic text they either adopted a deep approach, by trying to understand the underlying meaning intended by the author, or a surface approach in which superficial features are committed to memory.

Intermediate Approaches to Learning

The characterisation of approaches to learning has been revised following research largely emanating in Hong Kong. Kember and Gow (1989, 1990) compared factor structures of data from questionnaires used to measure approaches to learning with those from elsewhere and interviewed students about their approaches to tackling specific academic tasks. Analysis suggested that memorisation might be occurring in conjunction with attempts to reach understanding in a 'narrow approach'. Students worked systematically through texts section-by-section, attempting to understand each new concept and then commit it to memory before proceeding to the next. The following quotation, from an interview with a Hong Kong student, illustrates the approach.

> I read in detail section by section. If I find any difficulties I try my best to solve the problem before I go onto the next section. … If you don't memorise important ideas when you come across them then you will be stuck when you go on. You must memorise and then go on — understand, memorise and then go on — understand, memorise and then go on. That is my way of studying. (Kember and Gow 1990, p. 361)

Other intermediate approaches have subsequently been identified. Marton et al. (1996) reported two combinations of memorising and understanding, one of which took a different form to the narrow approach described above. The two variants were distinguished by whether the attempt to understand came before or after the memorisation. When memorisation came first, it was used as an attempt to reach understanding.

Tang (1993) found variants on a surface approach in which Hong Kong school students made limited attempts to order or understand material to reduce the memorisation load. The students initially intended to memorise material but found the memory load became such that some selection became necessary as they progressed through school. Watkins (1996) interpreted interviews with Hong Kong secondary school students as showing that students developed through a sequence of three or four stages. Initially their intention was to achieve through reproduction, by rote-learning everything. The students then passed to the next stage of rote-learning things perceived as more important. In the subsequent developmental stage, the students started to see the benefit of trying to understand material before committing it to memory.

Tang (1991) observed students initially employing a deep approach by trying to understand concepts, but then committing the material to memory to satisfy assessment requirements. This intermediate approach was used by students who had a preference for seeking understanding, but recognised that their examinations normally required them to reproduce material. They, therefore, tried to understand the concepts and then made sure the material was learnt so they could get a good grade in the examination.

Kember (1996, 2000) suggested that the various forms of combining memorisation and understanding meant that approaches to learning might be better characterised as a continuum rather than dichotomous deep and surface approaches. The positions upon the continuum are characterised by the intention and the strategy employed (Table 9.1).

Support for the continuum model of approaches to learning comes from a study in which the revised Study Process Questionnaire (R-SPQ-2F, Biggs et al. 2001) was completed by large samples of university students in Hong Kong and Sydney (Leung et al. 2008). Multiple-group analyses using structural equation modelling showed configural invariance, implying that students from the two countries were employing the same conceptual frame of reference when responding to the R-SPQ-2F. This suggests that the continuum characterisation of approaches to learning is likely to be applicable for Western as well as Chinese students.

The correlations between deep and surface approaches for universities in both Hong Kong and Sydney were negative (Hong Kong = −0.39, Sydney = −0.63). These substantial negative correlations are consistent with the continuum model of approaches to learning, as they imply that the deep and surface approaches can be envisaged as opposite ends of a spectrum.

Comparison of mean scores showed the Hong Kong sample to be higher on both deep and surface approaches, with the effect sizes for differences (d) on surface approach being substantially larger than for deep approach (d = 0.75 versus d = 0.24, respectively). The difference in mean scores suggested cultural differences in the extent to which particular approaches are employed; with the Hong Kong

Table 9.1 Approaches to learning as a continuum between deep and surface poles

Approach	Intention	Strategy
Surface	Memorising without understanding	Rote-learning
Intermediate 1	Primarily memorising	Strategic attempt to reach limited understanding as an aid to memorisation
Understanding and memorising	Understanding and memorising	Repetition and memorising to reach understanding
		Seeking comprehension then committing to memory
Intermediate 2	Primarily understanding	Strategic memorisation for examination or task after understanding reached
Deep	Understanding	Seeking comprehension

sample reporting greater use of both deep and surface approaches. The most likely explanation of these results is that the Hong Kong students had a greater propensity to employ combinations of approaches or intermediate approaches.

The existence of the intermediate approaches provides one explanation for the paradox of the Chinese learner. Chinese students could have been observed appearing to try to commit material to memory. It is common, for example, to see them with cue cards of key facts before tests and examinations. They can also be observed rehearsing written speeches before presentations. These visible signs of attempts to memorise would normally be interpreted as rote learning or mechanical memorisation, as that is what such behaviour would commonly imply if the students were from the West. The assumption would therefore be that students displaying such behaviour were employing a surface approach to learning and that was a common trait among Chinese students. However, the discovery of the intermediate approaches means that the signs may not have been diagnostic of a surface approach—the students could have been combining memorisation with efforts to understand material, which is not consistent with either rote learning or a surface approach.

The Intermediate Approaches and Performance

The intermediate approaches could provide one explanation for the good performance of Chinese students. Seeking understanding or employing a deep approach tends to be associated with positive academic outcomes. It is hard, if not impossible, to perform tasks which are more complex than reproduction or routine application without a reasonable understanding of the underlying constructs.

There are, though, also advantages to studying if memorisation is employed in addition to gaining understanding. In which case, employing one of the combined approaches offers the best of both worlds. The least justifiable case is that assessment often requires little more than reproduction, so rewards those who have committed material to memory.

There are much more positive rationales for the role of memorisation in learning if it is in combination with attempts to reach understanding. Performing higher level tasks can often be difficult or impossible without basic knowledge which needs to be committed to memory. Good examples are of two of the most fundamental areas of learning. In mathematics, few computations can be performed unless the multiplication tables have been learnt. When learning a new language, it is hard to make progress without memorising a basic vocabulary and the fundamental rules of grammar. These necessary acts of memorisation are not surface learning. They are not trivial tasks undertaken just because they are set by the teacher. Students can work very hard at the task of memorising such foundation knowledge, which indicates that they are not employing a surface approach, which is characterised by minimising effort.

Chinese students should be good at these learning tasks which require, as a prerequisite, bodies of material to be memorised. One reason is this greater propensity for employing intermediate approaches to learning which incorporate both understanding and memorisation. They also trained to be good at memorisation, in their early years of schooling, because of the need to learn a character-based language. Indeed the time and effort spent in constant rehearsal and reciting while learning the characters at an early age may well be a possible explanation for the greater propensity to use intermediate approaches.

Competition in Education as a Motivating Factor

In Asia there is often intense pressure to perform well in school-level examinations because of restricted access to the latter part of secondary education and/or limited places in good quality universities. Many Asian countries retain elite educational systems. Progress towards mass higher education varies across the region, and in some cases is complicated by the presence of colleges or universities of varying types and quality.

Hong Kong can be used as an example. Only about 17 % of an age group gain entry to one of the seven universities funded by the UGC of Hong Kong (University Grants Council of Hong Kong 2006). To cater for the large numbers of students unable to gain one of these places, the Government has encouraged the growth of a community college sector on a self-financing basis. However, there are issues with the community colleges as the associate degrees they award do not often articulate into a place at a UGC-funded university, nor are they perceived by students, the public or employers as suitable terminal awards (see Chap. 8 and Kember 2010). There is, therefore, a very strong desire to obtain a place in one of the UGC-funded universities.

In Hong Kong, like many other Asian countries, entry to university depends almost entirely on results in externally-set examinations. The combination of the significance of the examinations and the elite educational systems naturally prompts both pupils and teachers to concentrate attention upon passing examinations.

These pressures inevitably influence approaches to both learning and teaching in both positive and negative ways. The importance of the examinations means that practices such as coaching for examinations and remembering model answers are common. This is often exacerbated by examinations which are less than ideal because they reward those who are good at reproducing model answers.

However, the pressures do provide a very powerful motivating force to work hard and perform well throughout the education system. In terms of the motivational orientation framework, goals are set very high. As the pressure is exerted from kindergarten to university, and reinforced by teachers, parents and fellow students, the levels of compliance are also very high.

Generation by Generation

In Chap. 3, it was pointed out that in Chinese and most Asian societies achievement motivation has a more family and societal orientation than the individual nature of achievement motivation in the West. This results in additional pressures from parents on their children, but also provides an environment in which study is expected, encouraged and supported.

These family achievement motivation pressures are often reinforced by expectations of social advancement through education. It is common for one generation of an extended family to make financial sacrifices to enable the next generation to receive a better education than they did. In Hong Kong there were many migrants from mainland China at the time of the cultural revolution. They were, in the main, poorly educated, but they laboured hard for long hours to ensure that their children could receive at least a basic education. This generation then had aspirations that their children would become university students; such that first generation university students are currently relatively common in Hong Kong universities. This creates an obligation to both do well in studying to take full advantage of the opportunity provided and also to ensure that results are good enough to obtain a prestigious well-paid position which will enhance the status of the family and result in a financial dividend for the sacrifice.

Less Motivation in West Because of Mass Higher Education

In contrasting West with East, I will take Australia as my prime example of the West. This is mainly because it is where I now live and know most about. It is also quite typical in many respects. In PISA rankings it has usually come close to the USA and the UK; two countries which have had leading impacts upon the Western educational psychology literature.

For this section Australia is typical of the West as it has achieved mass higher education. The effect of mass higher education on motivation was discussed extensively in the previous chapter. What is pertinent to bring forward to the discussion here is the contrast between the levels of individual goals in the elite educational system in Hong Kong and those in the Australian system now that mass higher education has been achieved. Motivational goals in school in Australia can be set substantially lower than those in Hong Kong as entry to university is so much easier.

The existence of the compliance facet, as a long term, largely unconscious manifestation of other facets of the motivational framework, suggests that motivation and attitudes to work have a long term element on top of the relational or contextual influences. In Hong Kong attitudes to hard work develop as early as kindergarten. In Australia there is a lot less pressure.

The move towards mass higher education has undoubtedly brought many benefits, as was discussed in the previous chapter. At some point, though, it does seem appropriate to raise the question as to what is an appropriate entry level or what proportion of an age group should be admitted to university. Australia universities are currently largely free to admit anyone prepared to commit themselves to the eventual HECS payments for tuition. The more prestigious universities and courses which are in demand set high entry standards. Economic imperatives force other universities to be less choosy.

There has been some discussion of restricting entry to teacher education courses to better performing students. The rationale has been the belief that teachers need a good knowledge of subjects to teach well, rather than any consideration of motivation. The idea that making it harder to get into university might have a beneficial impact on motivation at school does not seem to be high on agendas.

What perhaps might be considered is a return to restricting university entry to school leavers who have reached a good standard in the senior secondary assessment, but returning to the open entry policies for mature students. The previous chapter discussed how uncommitted school leavers can become highly motivated by the time they are ready for mature entry schemes.

Competition, Economic Advancement and Culture

The previous sections have pointed out the impact on motivation of having to strive for relatively restricted numbers of places in schools and/or universities. If winning one of these places opens up the possibility of a well paid career it can provide a great inducement to study.

However, there are many countries with restricted entry to universities which have not achieved anything like the success in international testing of China and other East Asian countries. In some of these there is perhaps less incentive to win one of the restricted educational places as economic benefits tend not to follow from a better education as opportunities for advancement are so limited. However, there are many countries where a better education does bring great benefits which do not share the level of commitment to education shown by the Chinese. For explanations we have to move on to cultural differences.

Cultural Differences in Motivation

It is appropriate to start this section with a brief guide to interpreting cultural differences. Secondary texts and popular textbooks often seem to imply that cultural differences, and distinctions on other psychological measures, are dichotomies. For example, that all Chinese show characteristic X, while all Westerners show characteristic Y.

For this to be true would imply that all Chinese are the same, as are all Westerners. In fact, if a quantitative measure of an attribute or trait were employed, the results almost always show two curves (often approximating to normal distributions) which overlap—and often the overlap is considerable. This means that the statement at the end of the previous paragraph would be better interpreted as the majority of Chinese show characteristic X and the majority of Westerners show characteristic Y. However, there can be (often substantial) minorities for whom the opposite is the case. There can also be marked differences in the degree to which individuals display the trait in question.

Confucian Tradition

Confucian-heritage societies are known for traditionally showing respect to education. Lee (1996) has reviewed the writing of Confucius on the topic of education. Lee believes that the term learning pervades the *Analects* to the extent that it might be interpreted as a book of learning. The philosophy became enshrined in a tradition of cultivation of the self and of scholarship to provide a preparation for government office. This is definitely a tradition which lives on, as Chinese societies continue to show respect to education and teachers.

The Confucian-heritage respect for education is manifest through enhanced levels of motivation to seek admission to courses and make commitments to studying once enrolled. In terms of the motivation framework, individual goals are set at a high level. As the Confucian respect for education pervades society, there is support, through the sense of belonging facet of the framework, for educational endeavors from family, friends and classmates. The Confucian tradition can also be expected to influence the level of compliance as it is considered a normal behaviour for students to work hard.

Perpetual Students in Taught Postgraduate Courses

Interesting evidence of the importance attached to education comes from the interviews with the taught postgraduate (TPg) students. When asked about why they had enrolled in TPg courses, most advanced several reasons, consistent with the overall motivational framework, as outlined in Chap. 4. A phenomenon, which was confined to the TPg students, was labeled ‘perpetual students’, who enrolled in one TPg course after another. As soon as they finished one course they were looking for another to enroll in. Some had completed quite a diverse array of courses.

It is not clear to what extent the category of perpetual students is a Hong Kong or Chinese phenomenon. The Confucian tradition of respect for education could definitely play a part in students electing to do course after course. It also probably

contributes to what is believed to be the relatively high numbers taking TPg awards in Hong Kong. However, such comparisons are not easy as reliable comparative international data on students taking part-time TPg awards are less readily available than that for school or undergraduate participation rates.

Another interesting phenomenon concerning Hong Kong TPg students is the low drop-out rates. For full-time undergraduate courses, drop-out rates are negligible. Very few TPg students withdraw before completing their study, even though the part-time students are usually full-time employees who are very busy with their work in the highly competitive society of Hong Kong. This seems to be another indication of the importance attached to education in Chinese society.

Social Nature of Achievement Motivation

As was discussed at length in Chap. 3, in the Western educational psychology literature, achievement motivation is normally characterised a having an individual orientation. However, in Chinese society achievement motivation has traditionally been regarded as having a more social-orientation (SOAM) from the family and the clan. In SOAM the goal is set by others rather than by the individual. The action necessary to achieve the goal and the evaluation of its attainment were also determined by others. The traditional motivation resulting from SOAM are reinforced by the strong tradition of filial piety (Chen 2010; Ho 1996). There is, therefore, an expectation that students will strive hard to meet the expectations of family members and close social contacts.

In the motivational orientation framework, the social orientation is represented by the sense of belonging facet. Chapter 4 showed how family played a major role in decisions about whether to try to enter university, which subsequently resulted in high levels of support for students' endeavours.

Tradition Versus Competition or Tradition and Competition

The greater degree of collectivism in many Asian societies implies that traditionally achievement motivation has been seen as having a more social or family orientation. The degree of collectivism still seems to be such that characterising achievement motivation of Asians primarily as an individual drive and a competitive force, as it is defined in the Western educational psychology literature is not appropriate.

However, the effects of the education systems appear to act in the opposite direction. Much of the East retains an elite education system, particularly with respect to university entry, so competition between individuals can be intense. The impact of mass higher education in the West has tended to reduce the need for competition to enter university.

In one of the dichotomous characterisations of motivation these positions would be seen as contradictory or as a tension between tradition and the impact of educational change. However, the multi-dimensional framework posited in this book can accommodate both types of motivation. The motivational drive does not have to be either individual and competitive or social in nature, but there can be influences from elements of both.

The motivational framework can be interpreted as indicating that the East can draw influences from the best of both. There are high goals set on the individual goals facet because of the competition throughout the elite educational system. In addition, though, there is strong support from family, classmates, teachers and friends from the sense of belonging facet.

Attribution for Success

Weiner's (1986, 2004) attribution theory of motivation advances the view that the locus of attribution for successes and failures varied between people and could have consequences for future behaviour. Western students have a tendency to attribute success to inherent ability (Weiner 1986) or to having a good teacher (Stevenson et al. 1993; Stevenson and Stigler 1992). Both factors are difficult to control and the latter is external to the individual.

Chinese students, by contrast, tend to attribute success to effort or hard work (Hau and Salili 1991, 1996; Salili 1996). There is, therefore, an internal or personal locus of attribution for success or failure which can be within the control of the individual.

The difference in locus of attribution and the degree to which it is under the control of the individual logically relates to future behaviour. If Western students perform poorly when assessed, and attribute that to a lack of ability or poor teaching, they might work less hard for the next test because they feel that they do not have the ability to succeed. If a typical Chinese student, however, performs poorly in an examination, they are more likely to work harder for the next test because they attribute their failures to not working hard enough.

Schooling Differences

In the remaining sections of this Chap. 1 consider some differences between the nature of education in Hong Kong and Australia. Comparison between the two places, alone, should be of value, as Hong Kong has been one of the high performing territories in the PISA testing. In Australia, by contrast, there has been considerable criticism by the press and politicians of the country's results. Results from the annual national testing through the NAPLAN scheme (Australian Curriculum Assessment Reporting Authority 2015) have also revealed substantial

proportions of students who fail to meet the standards specified as appropriate for their age (Australian Curriculum Assessment Reporting Authority 2015).

Australia and Hong Kong can also be equated to related countries or territories with similar levels of performance. Hong Kong can be grouped with other Confucian-heritage regions, such as mainland China, Taiwan and Singapore. It can also be seen as part of the East Asian regional group, which has consistently ranked high in the PISA comparisons. The performance of Australia is similar to that of other Western countries which are predominantly English speaking. In particular Australia usually ranks in the PISA testing at a similar level to the USA and the UK; countries which have had a strong influence on the Western educational psychology literature, which is a pertinent consideration for this chapter.

It has to be stated clearly that little of what follows is derived from the three studies, which provided the research database for the remainder of the book. I have conducted no research on motivation in Australia, though the Western educational psychology literature on motivation is vast. The majority of suggestions for the differences in performance relate to the school sector, while my data were from higher education.

What follows is based mainly on my observations of Hong Kong and Australia and of discussions with educators in the two regions. I have identified aspects of the two educational systems which display distinct differences, which seem likely to relate to the relative levels of performance in the comparative testing. I am certainly not claiming that they are the reasons, rather making suggestions for furthering the dialogue on this issue and opening up avenues for future research.

It also has to be said that the characteristics of the Hong Kong education system which appear to contribute to the evident competitive drive, and probably have an impact on the performance in comparative testing, are not universally valued in Hong Kong. On the very significant issue of the intense competition for places in the best schools and universities, the attitudes could be interpreted as equivocal. The negative effects the competitive system has on learning outcomes, through the adoption of teaching practices which encourage remembering material for examinations, is widely decried to the extent that it has led to the Government introducing a radical reform of the entire education system. The international schools, which follow Western curricula, are very popular with local parents in spite of the high fees. Yet teachers still see examination results as their and their pupils' main driving force. Parents pressure their children into doing homework and performing well as early as kindergarten. Tutorial schools, which provide additional after school coaching aligned to successful examination performance, are very well frequented.

On reflection I wonder if the attitudes to the competitive educational system in Hong Kong are best interpreted as equivocal. An alternative interpretation is that, once again, the position sought is the best of both worlds. There is a desire to reform the educational system, so that the negative consequences of examination pressures on approaches to learning and teaching are reduced. However, there is also a desire to maintain the high levels of motivation and effort, which I have attributed to a

combination of the competitive system and the Confucian tradition of respect for education. There is then a desire to combine the lessons from research into curriculum and pedagogy from the West with the superior work ethic of the East.

Paradox of the Chinese Teacher

Earlier in the chapter the paradox of the Chinese learner was discussed. Chinese learners were perceived as employing approaches to learning associated with poor learning outcomes in the Western educational psychology literature, yet they consistently out performed their Western counterparts in international comparisons.

There is also a parallel paradox associated with teaching practices in mainland China, and to a lesser extent in Hong Kong. How can the superior performance of Chinese students be explained when the teaching practices are commonly believed by Western observers to be inconsistent with those associated with good learning outcomes in the Western educational psychology literature?

Impact of Large Classes

The difference which has been commented upon most often is class size. Cortazzi and Jin (2001) report that classes in mainland China are normally considerably larger than those in Australia. It is hard to specify how large, however, as there is much more variation in class size in China than Australia. Cortazzi and Jin (2001) note that observers have recorded variations between provinces, between urban and rural schools and seasonal variations in rural schools when parents want help from their children. Class sizes in Hong Kong are also larger than those in Australia, though not as big as Chinese ones.

An interesting contrast is in the press to reduce class size. Class sizes in Australia are relatively small because teachers, educationalists and unions have strongly advocated reducing the number of pupils in school classes. A significant proportion of the increase in Government spending on education has been devoted to reductions in class size.

Even though classes in mainland China are large, Cortazzi and Jin (2001) found there was little pressure to reduce class sizes for three reasons. Firstly, space pressures often restricted the opportunity to build more classrooms. Secondly, teachers normally specialise and teach only one or two subjects, even in primary schools, and this was possible if there are large classes and schools were also big. Thirdly, large classes meant that teachers could teach fewer lessons; so had more time available for preparing high quality lessons.

The fact that Chinese schools have not seen it as a pressing issue to reduce class sizes even when it has been possible to do so, suggests that the size of classes is not

perceived as a major determinant on the quality of learning and teaching. If this is the case, then the perception has a degree of consistency with Western research. Hattie's (2005) meta-analytic work, concluded that reducing class size had not led to major improvements in student learning, as measured by effect sizes. It was possible for class size reductions to result in worthwhile increases in the quality of student learning, but only if certain conditions were met.

Taken together the Chinese ambivalence to reducing class size and the Western research showing that smaller classes are often not associated with better learning outcomes, suggests that it cannot be inferred that Chinese teaching is less effective because class sizes are larger. If there is a paradox associated with Chinese teaching, it is not associated with class size.

Stigler and Hiebert (1999) conducted comparative studies of teaching in different countries and observed that each culture had developed its own script for teaching. They analysed video-tapes of secondary school classrooms in Germany, Japan, and the United States. Their very significant conclusion was that 'they were amazed at how much teaching varied across cultures, and how little it varied within cultures' (p. 10). The best way of interpreting the teaching of large classes in China is that the Chinese have developed a script for teaching which deals well with large classes.

Teaching Large Classes Well

Some Western observers have noted the large class sizes in Chinese schools and associated it with poor teaching. They have associated the teaching style for coping with the large classes as being more didactic, expository or authoritarian and with the students apparently less engaged in activities.

However, Biggs and Watkins (2001) believe this to be a mis-perception. Firstly, they believe these observers were focussing on the wrong thing; they were looking at teaching style or performance when they should have been looking at student learning. Secondly, they were looking through a Western lens, rather than accepting the Stigler and Hiebert (1999) concept of a different script. Taking these two mis-perceptions together implies that the observers overlooked a different way of teaching which was effective for student learning in the cultural context.

The Chinese Teaching Script

Having raised the idea that there is a different teaching script in the Chinese classroom, the obvious next step is to examine that script. A convenient way to do this is to synthesise summaries from two texts. The first is a summary of important features of teaching in Cortazzi and Jin's (2001) work on large classes in China. The second is from Biggs and Watkins (2001), who note similar elements to teaching and learning between Hong Kong and Mainland China. As there is much

Table 9.2 Elements of the Chinese teaching script

Cortazzi and Jin (2001)	Biggs and Watkins (2001)
Peer observation	
Teacher preparation and group support	Careful planning
Aspects of structuring classroom presentation, practice and participation	Timed questioning and associated activity
Learner-trained learning	Learner-trained learning
	Vicarious learning

commonality between the two, it is convenient to tabulate the two summaries (Table 9.2).

The degree of consistency between the two columns in the table helps to authenticate the conclusions drawn from the results. There is also conceptual consistency down the columns in terms of the relationship between elements of the distinct teaching features. The practices at the top of the table can be seen as contributing to the outcomes at the bottom.

Cortazzi and Jin (2001) describe the peer observation as part of a comprehensive staff development and support process for teachers, which involves both model teachers and model lessons. This leads on to the careful preparation of lessons. These can be improved through the peer observation and shared through the supporting network.

The lesson plans include structured activities. The supposition that the large class sizes in China implies didactic teaching appears to be without foundation. The different teaching script for the large classes includes activities which suit the class size and carefully scripted lessons. These tend to be short in duration and might involve a limited number of students in each activity. However, the rest of the class are trained to learn from those who are involved. A combination of the careful planning and the learner training appears to result in activities which are effective for achieving intended learning outcomes.

Importance of Mathematics

The international comparison testing results, cited at the start of the chapter, show particularly marked differences in mathematics. The top seven countries in mathematics in the 2012 testing of 15 year-olds were all in East Asia (OECD 2012). These results do not surprise me a bit. The attitude to mathematics, and to a lesser extent science, in Hong Kong and Australia differ markedly.

In Hong Kong the mathematics and science streams at school are regarded as the most prestigious—and this applies to both girls and boys. At university the subjects

with the highest entry standards are ones which apply mathematics to business, such as finance and actuarial science. Again females more then hold their own. In mainland China, seven of the nine traditionally top ranked universities are universities of science and technology. This is indicative of the importance China places on science in striving for economic advancement and must also impact upon students desire to study science and mathematics.

In Australia, like many other Western countries, there is a widespread dislike or fear of mathematics, which appears to affect those of all ages (Thomas 2000). This causes issues in teacher education as there is a shortage of trained secondary mathematics teachers and concerns that the level of understanding of mathematics is insufficient for primary teachers to adequately teach the subject. Science and mathematics have become sufficiently unpopular as university subjects that departments have lost staff or even closed.

The symptoms of the dislike and poor performance in mathematics have been obvious to those in the West for some time. Governments in Australia, the UK and the USA have spent considerable amounts of money attempting to address the issue, but it still remains a major problem.

Explaining the differences in attitude to and performance in mathematics in the two societies is complex. There is evidence of differences in the approach to and quality of teaching of mathematics between Australia and Hong Kong, which is consistent with the differing teaching script of Chinese classes discussed above.

Observational studies compared typical mathematics classes in Hong Kong, Austria, Czechoslovakia, The Netherlands, Sweden, and America (Leung 2005). According to the judgment of an expert panel, the Hong Kong Chinese teachers, spent more time talking, but covered topics in greater depth and with greater coherence, and were more likely to engage their students in understanding the topics covered than were their counterparties in all the other countries. Leung (2005) concluded that the observed Hong Kong classrooms involved a much higher quality of teaching and learning than the classes in at least four of the other countries. Fan et al. (2004), have produced a book which analyses in detail how Chinese mathematics teachers enhance student learning in ways rather different to Western approaches.

It may well be instructive for Western educators to look carefully at this alternative script for teaching mathematics. However, making significant progress will be a difficult and complex problem as long as there are such marked differences in the attitude to mathematics in the two societies. It seems most unlikely that there will be progress in Australia while many primary school teachers dislike mathematics and have an inadequate grasp of the subject and there is a shortage of qualified secondary mathematics teachers. The issue has become a vicious circle and a self-perpetuating problem.

Inclusiveness Versus Selectivity

The concept of inclusiveness is deeply embedded, morally and legally, in Australian education, consistent with the philosophy of a fair go for all. To provide a contrast with Hong Kong, and much of East Asia, the aspect of inclusiveness I intend to concentrate on here is inclusiveness by ability: a philosophy by which students are grouped together, in classes and schools, regardless of achievement or ability.

Interestingly, in spite of inclusiveness being an entrenched policy, many parents do their best to circumvent the effects of inclusiveness through doing what they can to get their children into schools perceived as better—which are effectively the ones which are the most exclusive or least inclusive. Many of those who can afford the fees, send their children to private schools. Others choose to live in areas which make their children eligible for entry to the better state schools.

Hong Kong, by contrast, practices selectivity. Schools are categorized into three bands and there is a hierarchy within bands, particularly the top one. Schools select pupils according to their results in the public examinations.

In Hong Kong the concept of inclusiveness is regarded as incomprehensible. It seems perfectly logical that those who work hardest and perform best in the examinations are those who are awarded places in the best schools. The meritocratic system then enables these elite schools to educate the high performers who go on to supply the high achievers Hong Kong needs for its economy to prosper.

These radically differing attitudes may be partly explained by attribution theory (Weiner 1986, 2004). It was noted earlier in this chapter that Chinese students tend to attribute success to hard work. If success is seen as an outcome of hard work, it seems perfectly reasonable to reward those who work hard by offering them places in the best schools. These schools also support the approach as an appropriate way to organize an educational system as they are able to recruit high achieving pupils who are also believed to have shown evidence of being hard working.

In Australia, by contrast, if success is attributed to innate ability, this can presumably be equated to parental upbringing or socio-economic factors. Attribution to having a good teacher might also be seen as an indicator of coming from a privileged background. These attributions of success to the background and upbringing of the student, rather than to hard work, would seem to open society more to accept inclusiveness as a step towards social equality.

Effects of Inclusion and Selectivity

It seems most unlikely that it is a coincidence that the East Asian countries performing best in the recent PISA comparisons (OECD 2007, 2012) have educational systems based on selectivity, while Australia, with its inclusive school system, languishes down the charts.

The perceived quality of educational institutions is related to their degree of exclusiveness. The positions of universities in the world ranking tables show a good relationship to the difficulty of getting into them. Similarly within the school system, the schools with the best reputations tend to be the most exclusive ones. Testing, such as the NAPLAN testing in Australia, tends to confirm that their reputations are justified.

Critics of these high flying institutions will no doubt argue that their results are largely a case of quality in resulting in quality out. While there may well be a rational case for this assertion, raising the argument in a discussion of inclusiveness actually concedes the point I am trying to make here; that there will be high quality outcomes when students are selected by ability.

Comparison between university and school sectors is interesting. If anyone raised the argument that Harvard, MIT and Oxbridge should have mixed ability intakes, I suspect that they would be dismissed out of hand, even in countries in which inclusiveness is entrenched in the school sector. Why is it then that in one sector inclusiveness is regarded as completely inappropriate, whereas in some countries it is enshrined in the school system?

Top universities and schools justify the degree of selectivity they practice by claims that it enhances motivation of their cohorts. The students stimulate each other through competition and through intellectual engagement with each other. Teachers are able to set demanding tasks which arouse interest and motivate the students to perform well.

By contrast, the teachers of mixed ability classes face a daunting task. Most probably pitch content and activities at the level of the midpoint of the class's ability level. This means that the high achievers are not challenged, become bored and are often under-occupied. Those of lower ability get frustrated and left further behind. The whole class can become hard to manage. There is a perfectly good argument that it is not just higher ability students whose performance is affected in an inclusive classroom.

The earlier discussion of the paradox of the Chinese teacher, noted that class sizes in schools in China and Hong Kong are normally significantly larger than those in Australia, yet students in the East Asian classrooms do very well in spite of theories which suggest small classes ought to produce better results. A highly plausible explanation is that the Chinese teachers are able to actively engage the larger classes because the pupils are relatively homogenous in abilities. They can be confident that the one well planned lesson and set of activities is appropriate for the whole class. Australian teachers, by contrast, struggle even with their smaller classes because their classes are much more heterogeneous in knowledge and ability; so they have to run several different lessons simultaneously.

Early Childhood as a Start to Schooling

A common afternoon sight on the buses and mass transport trains of Hong Kong was children travelling home, accompanied by their carers, from kindergarten. Invariably they would have a bag containing a drink bottle and lunch-box. Most also had work sheets as activities for homework and many would be working on these on their way home.

Serious study starts early in Hong Kong. Children need to do well in kindergarten to get into the better primary schools. There is a through train policy which means that those doing well in their primary school obtain a place in the associated high band secondary school. These have a good record in getting students into university. The pressure is, therefore, on from the word go. Kindergarten is the start of hard work, study and homework, rather than a venue for childhood development through play. In terms of the motivational orientation framework, conditioning towards high levels of compliance starts early.

The attitude towards this might be seen as equivocal. Parents regret the pressure placed on their children from such an early age. However, they do their best to get their children places in the kindergartens and schools with the best reputations, which coincidentally are those which place the most pressure on their pupils. The parents, themselves, also place pressure on their children to ensure they work hard at their studies and do their homework.

At government level, the system-wide review recommended changes to reform early childhood education (Education Commission 1999), however, this is the sector where there has been the least progress. Whatever can be done to reform the myriad of kindergarten operators, the government seems unlikely to be able to change the entrenched attitudes of the community. Pressure will continue to be put on children to study from an early age.

Conclusion

A succinct conclusion to this chapter is not straightforward. Perhaps the most apt conclusion is that there is no simple reason for the difference in performance between East and West. It is a complex issue with many contributing factors embracing cultural traditions, pedagogical and curriculum practices, learning patterns, the nature of the educational systems and the philosophies on which they are based.

One of the most significant features of this book is that it has championed a model of motivation in which there are multiple forms of motivation which can act in concert. Of the factors impinging on an interpretation of the differences in performance, the harnessing together of distinct forms of motivation in a best of both worlds scenario, has been a consistent feature of this chapter.

Motivation in the East is enhanced through high individual goals resulting from a highly competitive education system, which rewards those who perform well. The Confucian tradition of respect for education reinforces the individual goals. The tradition, though has a societal origin which introduces the societal element into motivation. Achievement motivation has been characterized as having a family or social orientation in Chinese society. At the same time, nowadays, it clearly co-exists with the individual competitive drive, which used to characterize achievement motivation in the West, but has recently subsided with the advent of mass higher education and material well-being.

Distinctions in the approaches to teaching are less clear. Class sizes in China are significantly larger than those in the West. This has been interpreted, through Western eyes, of implying didactic teaching. A better interpretation is that there is an alterative Chinese script for teaching which copes very well with the large classes. Teachers may spend significant amounts of time talking, with carefully-prepared scripts and explanations. However, there are also activities in the well-prepared lesson plans. Learners are trained for the types of activities, which put the stress on communal learning.

Quite what the West can take from this interpretation is perhaps the hardest part of the analysis. The differing teaching script in China would not be effective if transported directly into the West as the context is so different. However, greater study of the alternative script would undoubtedly pay dividends.

The systemic differences with respect to levels of motivation involve a mix of cultural factors and higher levels of individual goals. The latter seem clearly linked to greater levels of competition in the education systems. The West has achieved mass higher education. The East still has a high degree of elitism in highly differentiated higher education systems. The West embraces policies of inclusive education. The East believes that hard work and good results should bring rewards; so has more selective school systems. Whether the West has the desire or ability to take note of this analysis will need a complex society-wide debate.

References

Australian Curriculum Assessment Reporting Authority. (2015). *National assessment program*. Retrieved from www.nap.edu.au.

Biggs, J. B., & Watkins, D. (2001). Insights into teaching the Chinese learner. In D.Watkins & J. B. Biggs (Eds.), *Psychological and pedagogical perspectives* (pp. 277–300). Hong Kong: Comparative Education Research Centre, University of Hong Kong.

Biggs, J., Kember, D., & Leung, D. Y. P. (2001). The revised two factor study process questionnaire: R-SPQ-2F. *British Journal of Educational Psychology, 71*, 133–149.

Bond, M. H. (Ed.). (1996). *The handbook of Chinese psychology*. Oxford: Oxford University Press.

Bond, M. H. (Ed.). (2010). *The Oxford handbook of Chinese psychology*. Oxford: Oxford University Press.

Chen, X. (2010). Socio-emotional development in Chinese children. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology* (pp. 37–52). Oxford: Oxford University Press.

Cortazzi, M., & Jin, L. (2001). Large classes in China: 'Good' teachers and interaction. In D. A. Watkins & J. B. Biggs (Eds.), *Teaching the Chinese learner: Psychological and instructional perspectives* (pp. 113–132). Hong Kong/Melbourne: Comparative Education Research Centre/Australian Council for Educational Research.

Education Commission. (1999). *Learning for life*. Hong Kong Special Administrative Region: Education Commission.

Fan, L., Wong, N. Y., Cai, J., & Li, S. (2004). *How Chinese learn mathematics: Perspectives from insiders*. New Jersey: World Scientific.

Hattie, J. (2005). The paradox of reducing class size and improving learning outcomes. *International Journal of Educational Research, 43*(6), 387–425.

Hau, K. T., & Ho, I. T. (2010). Chinese students motivation and achievement. In M. H. Bond (Ed.), *The Oxford handbook of Chinese psychology* (pp. 187–204). Oxford: Oxford University Press.

Hau, K. T., & Salili, F. (1991). Structure and semantic differential placement of specific causes: Academic causal attributions by Chinese students in Hong Kong. *International Journal of Psychology, 26*, 83–94.

Hau, K. T., & Salili, F. (1996). Prediction of academic performance among Chinese students: Effort can compensate for lack of ability. *Organisational Behaviour and Human Decision Processes, 65*, 83–94.

Ho, D. Y. F. (1996). Filial piety and its psychological consequences. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 155–165). Oxford: Oxford University Press.

Kember, D. (1996). The intention to both memorise and understand: Another approach to learning? *Higher Education, 31*, 341–351.

Kember, D. (2010). Opening up the road to nowhere: Problems with the path to mass higher education in Hong Kong. *Higher Education, 59*(2), 167–179.

Kember, D., & Gow, L. (1989). *Cultural specificity of approaches to study*. Paper presented the 6th Annual Conference of the Hong Kong Educational Research Association, Hong Kong.

Kember, D., & Gow, L. (1990). Cultural specificity of approaches to study. *British Journal of Educational Psychology, 60*, 356–363.

Lee, W. O. (1996). The cultural context for Chinese learners: Conceptions of learning in the Confucian tradition. In D. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 25–41). Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Leung, F. K. S. (2005). Some characteristics of East Asian mathematics classrooms based on data from the TIMSS 1999 Video Study. *Educational Studies in Mathematics, 60*, 199–215.

Leung, D. Y. P., Ginns, P., & Kember, D. (2008). Examining the cultural specificity of approaches to learning in universities in Hong Kong and Sydney. *Journal of Cross Cultural Psychology, 39*(3), 251–266.

Marton, F., & Säljö, R. (1976). On qualitative differences in learning, outcome and process I. *British Journal of Educational Psychology, 46*, 4–11.

Marton, F., Dall'Alba, G., & Kun, T. L. (1996). Memorising and understanding: The keys to the paradox? In D. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 69–84). Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Organisation for Economic Co-operation and Development. (2007). *Assessing scientific, reading and mathematical literacy: A framework for PISA 2006*. Paris: Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development. (2012). *PISA 2012 results in focus: What 15 year-olds know and what they can do with what they know*. Paris: Organisation for Economic Co-operation and Development.

Salili, F. (1996). Achievement motivation: A cross-cultural comparison of British and Chinese students. *Educational Psychology, 16*, 271–279.

Stevenson, H. W., & Lee, S. Y. (1996). The academic achievement of Chinese students. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 124–142). Hong Kong: Oxford University Press.

Stevenson, H. W., & Stigler, J. W. (1992). *The learning gap: Why our schools are failing and what we can learn from Japanese and Chinese education*. New York: Simon and Schuster.

Stevenson, H. W., Chen, C., & Lee, S. Y. (1993). Mathematics achievement of Chinese, Japanese and American children: Ten years later. *Science, 259*, 53–58.

Stigler, J., & Hiebert, J. (1999). *The teaching gap*. New York: The Free Press.

Tang, K. C. C. (1991). *Effects of different assessment methods on tertiary students' approaches to studying*. Unpublished Ph.D. Dissertation, University of Hong Kong.

Tang, T. (1993). Inside the classroom: The students' view. In J. B. Biggs & D. A. Watkins (Eds.), *Learning and teaching in Hong Kong: What is and what might be* (pp. 35–52). Hong Kong: Faculty of Education, Hong Kong.

Thomas, J. (2000). *Mathematical sciences in Australia: Looking for a future*. Federation of Australian Scientific and Technological Societies, Occasional Paper Series, no. 3.

University Grants Council of Hong Kong. (2006). *Facts and figures 2005*. Hong Kong: University Grants Council Secretariat. Retrieved from http://www.ugc.edu.hk/english/documents/figures/.

Watkins, D. (1996). Hong Kong secondary school learners: A developmental perspective. In D. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 107–119). Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Watkins, D., & Biggs, J. B. (Eds.). (1996). *The Chinese learner: Cultural, psychological and contextual influences.* Melbourne and Hong Kong: Australian Council for Educational Research and the Comparative Education Research Centre, University of Hong Kong.

Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer.

Weiner, B. (2004). Attribution theory revisited. Transforming cultural plurality into theoretical unity. In D. M. McInerney & S. V. Etten (Eds.), *Research on sociocultual influences on motivation and learning: Big theories revisited* (Vol. 4, pp. 13–29). Grenwich, CT: Information Age.

Chapter 10
Reflections on Motivation

The final chapter returns to the questions posed in the first chapter. Drawing together threads through the book relating to the questions provides some conclusions.

Theories of Motivation

Most established theories or models of motivation have come from the Information Processing (IP) tradition. As such, they have been derived top-down from theory. The more contemporary ones tend to derive new theory by taking into consideration or building upon existing theories on the topic. Researchers then proceed to test hypotheses derived from the theories, most commonly through experimental designs.

Higher education has been more strongly influenced by the student approaches to learning (SAL) tradition than IP, particularly outside the USA. However, when it comes to motivation, even higher education has chosen to adopt models derived from theory.

The most commonly cited visualisation has been the extrinsic/intrinsic formulation. Even for approaches to learning, which are central to the SAL tradition, the motivation components were designated as extrinsic and intrinsic motives. This is in spite of the fact that SAL is based upon naturalistic second-order research (Marton 1981).

The studies on which this book is based started out of dissatisfaction with the traditional interpretation of extrinsic and intrinsic motivation. Empirical results were quite inconsistent with the formulation, particularly for extrinsic motivation as a negative drive, dichotomous with intrinsic interest (see Chap. 3).

The three studies, therefore, followed a naturalistic open approach to researching motivation in higher education. They took a second-order perspective by using semi-structured open-ended interviews with students about the way they approached study tasks. These eschewed any guiding based on prior formulations of motivation.

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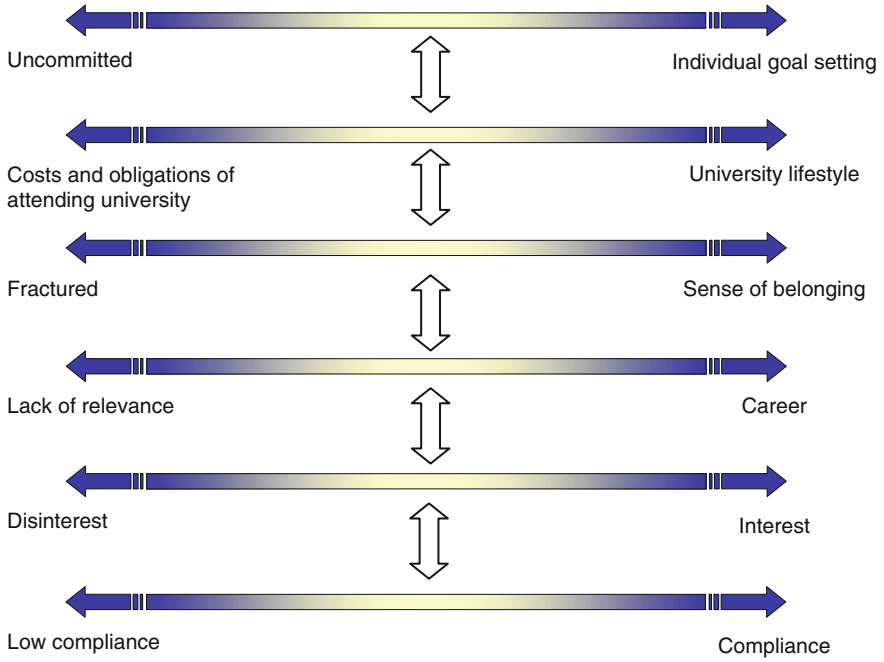

Fig. 10.1 The motivational orientation framework

Motivational Orientation Framework

The first outcome was the motivational orientation framework (Fig. 10.1). The analysis of the data from the three studies had revealed six themes or six distinct aspects of motivation. These are represented in the framework by the six continua.

That the framework is multi-faceted turned out to be highly significant when it came to interpreting phenomena. There had been a number of issues which had been problematic to interpret with single aspect models of motivation. It proved possible to reconcile factors which seemed contradictory by instead modelling them as acting in concert.

The first of these was the extrinsic versus intrinsic dichotomy, which inspired the studies. The inclusion of the career and interest facets of the framework, meant that forms of motivation which would be classified as extrinsic, which has been seen in a negative light, could now be re-interpreted as a positive form of motivation which could not only co-exist with intrinsic interest, but positively reinforce it.

Including the individual goal and sense of belonging facets in the model, similarly, meant that motivation was a function of the individual, but could also take on a social aspect through classmates, families and society. This resolved a major issue of interpreting achievement motivation, which was seen as an individual competitive goal in the West, but had a social orientation in the East. The motivational

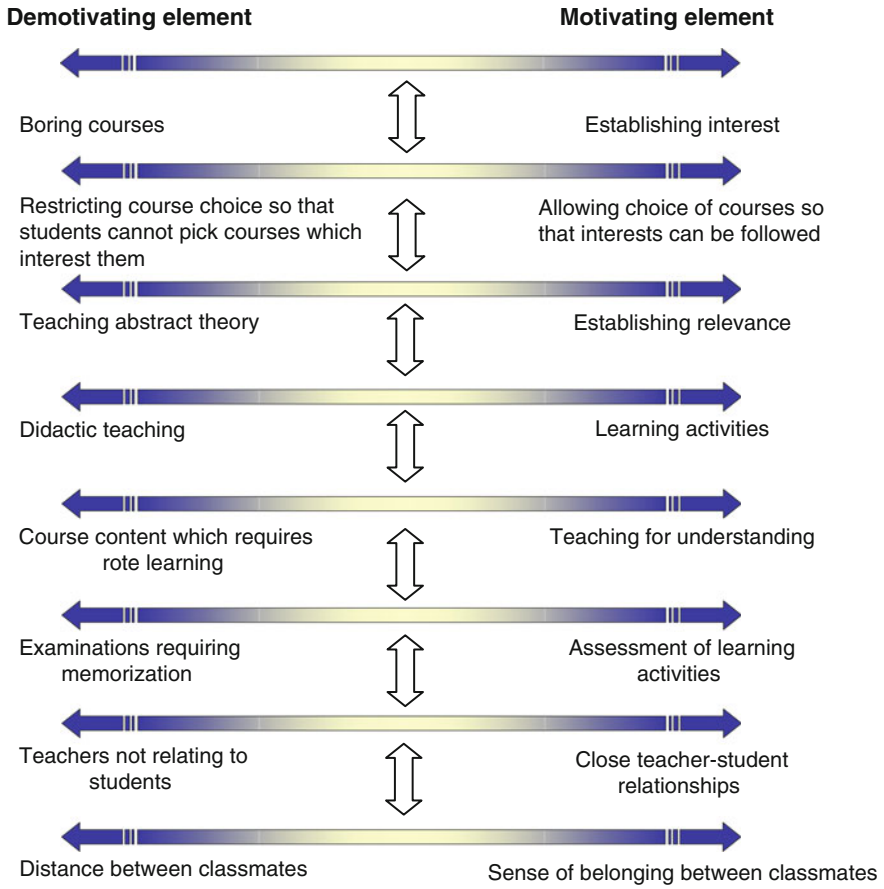

Fig. 10.2 Motivational teaching and learning environment framework

orientation framework visualises both individual and social motivations acting in concert.

These multi-faceted complementary interpretations turned out to be particularly important in terms of interpreting phenomena to explain the performance of Chinese or East Asian students. In many cases the Chinese appeared to be taking a best of both worlds approach. A good example being the boosts to individual goals from a highly competitive system, while still benefiting from the social nature of the sense of belonging facet.

Another key feature of the motivational orientation framework is that it is a dynamic model. It does not portray motivation as a function of an individual or a relatively stable cognitive style. Instead it is something which changes over time as a function of relational or contextual influences. These are represented on the framework by shifts across the continua.

Motivational Teaching and Learning Environment Framework

The most important of the contextual influences on motivation is the teaching and learning environment (Fig. 10.2). The book presented another derivation from the open-ended interviews; the motivational teaching and learning environment framework. This again is a multi-faceted model which takes into account eight elements of a comprehensive teaching and learning environment. If motivation is to be enhanced the whole of the framework needs to be taken into account. Teaching innovations which concentrate on single aspects of teaching are not sufficient.

The motivational orientation framework and the motivational teaching and learning environment framework have a similar representation or formulation. This is partly because they are part of a pair. One represents the nature of motivation, the other shows how that motivation can be influenced by the prime factor which it is a function of; the teaching and learning environment.

The other reason for the consistency of the relationships is the similarity of the nature of the two frameworks. Both are multi-faceted models, with each facet represented by a continuum with positive and negative ends. The facets can influence each other in the motivational orientation framework and act as a whole environment in the motivational teaching and learning environment framework. These inter-relationships are shown by the double-headed vertical arrows between continua.

Both models are dynamic, which can be represented by shifts across continua. Levels of motivation on each facet of the motivational orientation framework will be influenced by perceptions of changes in the elements of the teaching and learning environment.

Future Directions

The projects on motivation started with the aim of examining motivation in higher education with a fresh open perspective. The projects did not ignore existing theories, but aimed to see which theories, or modified versions of them, were most suited to the higher education sector. The motivational orientation framework which resulted is, therefore, a new formulation, but the six facets which make it up can be related to a substantial literature, as was done in Chap. 3.

Any fresh insight into a concept as important as motivation inevitably opens up avenues for further inquiry. It, therefore, makes sense to end the book with some consideration of what these might be.

Interpretation and Analysis

The book started with a series of questions commonly asked by those in the higher education sector. There are of course no simple answers to any of these questions. What the book does provide, though, is a pair of frameworks which make it possible to analyse and interpret these issues.

Two examples of applications are Chaps. 8 and 9. Chapter 8 examined the systemic-level issue of the move to mass higher education in Hong Kong. There is extrapolation to motivational issues in the expansion of higher education in the West. Chapter 9 considered the question of why Chinese or East Asian students are out-performing those from the West in comparative international tests.

In both cases the motivational orientation framework was able to provide pertinent insights. The inclusion in the framework of multiple motivational facets was, in both cases, an important aspect of the interpretation. Theories or models relying on single constructs would not have dealt adequately with the complex array of interacting issues.

Use as an interpretive and analytical framework is possibly the way in which this body of work will be most useful in the future. Issues in higher education have not commonly been examined in terms of motivation. The two frameworks advanced in this book may provide more sophisticated lenses to interpret issues in terms of motivation.

Generalisabilty

I argued in Chap. 2 that the three groups of students from which the data for the book were gathered were sufficiently consistent with those in higher education in other parts of the world that some degree of generalization of results should be possible. In Chap. 8 the motivational orientation framework was used to interpret issues connected with the massification of higher education, which is a worldwide phenomenon. Chapter 9 analysed the cross-cultural phenomenon of the performance of Chinese and East Asian students compared to those in the West. For the framework to be of value in analyzing global and cross-cultural issues of such significance adds credibility to the generalisabilty claim.

The globalization of higher education is an increasing trend. Universities worldwide tend to follow common goals linked to the metrics of world ranking tables. Academics tend to see themselves as members of disciplinary tribes (Becher 1989); so conform to common disciplinary conventions. The Bologna accord is leading to increasingly harmonized structures and curricula, and its influence is spreading beyond Europe. The student body is becoming internationalized as universities seek overseas students to boost their finances and exchange students enhance the global awareness of their student body. Facilitating these movements requires compatibility of qualifications and curricula.

A reasonable interpretation of the globalization trend in higher education is that research in the sector should be regarded as more generalisable than that from other educational sectors and possibly from other fields of research. In future research it would, though, be very useful to test the generalisability of the two frameworks. For qualitative work, a useful indicator of applicability would be the extent to which the frameworks are able to interpret and explain qualitative studies in higher education in other contexts. Such studies would not definitively prove generalisability by the standards of the scientific method, but the value of a model or theory is the extent to which it can explain or interpret phenomena in a range of contexts.

A major rationale for conducting the studies was that theories of motivation had normally been derived and tested with sectors other than higher education in mind. The three studies, therefore, sampled students typical of three major groups in higher education. Attempting to apply the two frameworks outside higher education, therefore, seems to be of limited value.

Questionnaires

The studies were entirely qualitative. The main outcomes—the two frameworks—are ideal, though, for the development of questionnaires. The motivational orientation framework includes six facets of motivation. A questionnaire derived from the framework should, therefore, have six scales, one for each of the facets. Items for the scales could be derived from the quotations in Chap. 5 which explained how the facets could be interpreted in terms of motivation to study. All items should refer to positive motivation, as questionnaire with mixed positive and negative items usually have poor psychometric properties.

Similarly the motivational teaching and learning environment framework could be turned into an eight scale questionnaire with a scale for each of the elements of the teaching and learning environment. The elements were illustrated in detail in Chap. 6; so this could guide the wording of items.

The formation and testing of questionnaires is discussed in detail in Kember and Ginns (2012). What is particularly relevant here is the discussion of validity as establishing validity is not easy. An approach which has found favour with many of the most widely used instruments, designed by researchers following the SAL paradigm, is making validity claims based on questionnaire designs following naturalistic qualitative studies.

Questionnaires based on the two frameworks could help greatly in establishing the generality of the motivational constructs. A standard way of investigating generalisability is by administering questionnaires in contexts in question. If the same or similar factor structures are found in different contexts, it is normal to accept that the instrument, and the constructs which underpin it, are applicable to each context.

The motivational orientation framework questionnaire could be useful for many other research applications in which relationships between motivation and other

factors or constructs are investigated. A questionnaire based on the motivational teaching and learning environment framework could be useful for studies which examine how students' perceptions of elements of a teaching and learning environment relating to motivation impact upon learning outcomes. This would relate to the large body of SAL research relating perceptions of teaching and learning activities to approaches to learning. Such a questionnaire could also be useful simply for evaluating teaching and learning. All too many of the instruments used for this purpose have no theoretical or empirical foundation and lack validity.

Participation, Persistence or Drop-Out

An issue which the motivational orientation framework should be of value in analysing and interpreting is that of levels of participation in higher education. This is an important issue as knowledge-based economies need a well educated workforce. For example, it is of considerable concern to the University of Tasmania that the State has the lowest tertiary participation rate of any of the Australian states.

A connected issue is that of persistence or drop-out. Boosting participation rates is of no avail if students drop-out before completing their course.

Neither of these issues was investigated in Hong Kong because (surprisingly) they were of little relevance! Participation rates, in the UGC-funded universities, were not held down by any lack of motivation for higher education—rather because the UGC places a cap on the numbers admitted to each undergraduate course. Studying persistence is not a high priority because drop-out from full-time undergraduate courses is negligible. Even from part-time TPg courses, drop-out is minimal. These distinctions with Western concerns on participation and persistence would make for a fascinating cross-cultural study related to motivation.

References

Becher, T. (1989). *Academic tribes and territories: Intellectual enquiry and the cultures of disciplines*. Milton Keynes: SRHE and Open University Press.

Kember, D., & Ginns, P. (2012). *Evaluating teaching and learning: A practical handbook for colleges, universities and the scholarship of teaching*. Abingdon: Routledge.

Marton, F. (1981). Phenomenography—Describing conceptions of the world around us. *Instructional Science, 10*, 177–200.