

# Shared understanding of students' approach to learning in transnational programs

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## **Abstract**

*In transnational universities, curriculum designers do not always teach the students who enroll in their courses and may not have a shared cultural background with either the students or the teachers who do teach these students. Yet shared knowledge and understanding among teachers, designers and students is important for quality learning to take place. This is particularly true in preparatory programs where the students may need to learn about the new culture of the university and the wider culture in which it is immersed. One area of potential misunderstanding is with student's approach to learning. This paper compares the learning approaches of Hong Kong students using Biggs Student Process Questionnaire, with the teachers' and curriculum designers' perceptions of these students' learning approaches. Differences were found which suggests more dialogue is needed between stakeholders in order to know transnational students and how they approach learning.*

## Introduction

Transnational university initiatives are possible today because of both improvements in communication and technology through the internet, as well as globalization which make the concept of transnational education attractive to both students and educators. In the past, a degree conferred on a student would reveal information on the physical location of that degree and thus the underlying assumptions about the culture and conditions under which the student studied. However, this may not be true in transnational universities. An important question is: should it matter? Should we be concerned that a student undertakes his or her studies in a country other than the one of the conferring degree? If it matters, then we need to ensure teachers, students and administration are aware of educational and cultural differences, so that the degree is set in conditions acknowledged by the community accepting these degreeed students. If it doesn't matter then there has to be some global university culture and educational standards, and there are none to date. Either way, the universities developing the transnational programs need to be aware of the culture and educational practices of these students, the teachers and lecturers involved, the administration and curriculum. The consequences of differences between these cultures and systems are often underestimated by those involved. Understanding of this difference is of crucial importance, as Hofstede and Hofstede (2005) believe, we may not realize ...how fundamental a phenomenon culture really is. It reflects not only our daily practices: the way we live, are brought up, managed and are managed, and die; but also the theories we are able to develop to explain our own practices. No part of our lives is exempt from cultural influences. (p. 170).

Developing curriculum and related teaching and student support for a transnational audience requires knowledge of, and sensitivity to, potential differences. Broad differences can be compared along cultural dimensions highlighted by Hofstede and Hofstede (2005). For example, people in different cultures broadly respond differently to power relationships, to unknown situations, to gender roles, to respect for traditions, and to societal responsibilities. In the education field this translates to differences in such things as teacher-student relationships, plagiarism or intellectual disagreement, praise of students, attitude to leisure time and learning styles and strategies. For example, if we look at power distance, people in Hong Kong, according to Hofstede, have a relatively high power index of 68 compared to Australia's 36 (highest 104 and lowest 11: Hofstede & Hofstede 2005, p 43-44). This may suggest Hong Kong classrooms are more teacher centered where students remain dependent on teachers even in higher education. But is this to say that Hong Kong students cannot become comfortable with student centered classes and become more independent?

In the education field, trying to pinpoint what are differences in values between cultures (e.g. power distance) and what are differences in cultural practices (e.g. student/teacher interaction) is difficult. The former are more robust and resistant to change, while the latter may change in different environments. For example, student approach to learning may have a foundation in cultural values, but students are able to stretch their styles and use different learning strategies to accommodate different environments. So looking at students' approach to learning in transnational settings may provide a window to the students' cultural values, as well as students' ability to accommodate some different approaches without affecting the underlying values.

This paper will focus specifically on approaches to student learning by comparing student and teacher response. It will draw evidence from part of an ethnographic study in Hong Kong undertaken by the author in a tertiary preparatory program in a transnational setting.

## Background

Chan and Drower (1997), in an article on teaching and learning for overseas Hong Kong students, conclude that 'how in the end universities respond to the learning styles of Hong Kong students and others from Confucian-heritage cultures depends largely on the extent they are aware of and respect different approaches to learning' (p. 59). Those who come in contact with students from East Asia are often aware of a teacher/student conflict in learning styles (Volet & Renshaw, 1996, Zhenhui 2001), but this awareness is often vague and based on incorrect cultural assumptions. However, there have been a number of cross-cultural studies which have either compared or commented on learning style or strategy differences in different contexts (e.g. Oxford, 1989 in foreign language instruction; Ellis (1994) in second language learning strategies; Stevenson & Stigler (1992) in mathematics instruction; Watkins (1996) on Confucian Heritage Culture (CHC)). Biggs (1996) for example, concluded that CHC 'students report a stronger preference for higher-level, meaning based learning strategies, and avoidance of rote learning, than that of Western students, both in their own culture and overseas in Australian institutions' (p. 49). Biggs concluded that CHC classrooms are highly adaptive so rote and repetitive learning are strategies students use to adapt to a particular teaching or learning situation.

It is not so much that learning approaches of students may conflict in a new learning situation (although this may happen especially where students are not as adaptive), but rather teachers' perceptions of students, styles and strategies may be incorrect and hence misunderstanding may emerge. In transnational programs it is important that we do not make assumptions about our students, so knowing their characteristics, in relation to learning and teaching, is essential. Investigating their strategies for learning would be a necessary part of an overall supporting strategy.

Many learning style/strategy inventories exist in the broad areas of instructional, social, information processing and personality (Curry, 1987) and no one will identify all learning approaches. We cannot bombard students with a multitude of inventories, nor will all of these be suitable in a transnational setting. Moreover the problem with many of them is the establishment of validity and reliability especially in an intercultural arena. The importance of this should not be underestimated as Hofstede and Hofstede (2005) illustrated in a Chinese Values Survey, developed in Hong Kong by Chinese academics. He found that that the cultural origin of the minds behind the questionnaire could alter the direction and strength of the questionnaire and the analysis.

One inventory has purported to establish reliability and validity in the higher education intercultural context is the Student Process Questionnaire (SPQ) originally developed by Biggs (1987) in terms of deep and surface learning. The Biggs questionnaire has been used extensively in Hong Kong and elsewhere in both university and school settings and he claims that it 'is embedded in the same network of constructs in different cultures' (Watkins & Biggs, 1996, p.9). Watkins maintains that the results of the questionnaires completed are 'generally supportive of the cross-cultural reliability and validity of the instruments and their underlying model' (1996, p.10). However the questionnaire has been criticised by others. For example, Tan & Goh (1999) suggest it distorts the cross-cultural outlooks and takes too much of an etic approach.

Nevertheless in an ethnographic setting, Tan & Goh suggests the Biggs questionnaire may be particularly useful as it was designed within an educational event in a 'Presage-Process-Product' model (Biggs 2001) where the student, teacher, approaches to learning and outcomes

interact in a dynamic system. So instead of the questionnaire being used as an instrument to discover a stable trait of students, it is used to help describe the nature of the relationship between the 'student, context and task' (Biggs et al., 2001, p.137). Thus it can be used to see how individuals differ (at the presage level); how different tasks are handled (process level) and, once we see the average approach of students in a class, how different classes or teaching contexts differ (product level: Here the contextual approach to learning is seen as one outcome of teaching).

While the SPQ has been updated and shortened to a 20 item questionnaire by Biggs et al. (2001), the reasons for this may have to do more with practicality of administration and use to which it can be put (i.e. to extract deep/surface factors only). However the original 42-item questionnaire may give a more detailed picture of student approaches which can be used both as a diagnostic and teaching tool and was thus used for this study. The SPQ questionnaire (Biggs, 1987) consists of 42 items grouped into six categories of Surface Motivation, Surface Strategy, Deep Motivation, Deep Strategy, Achieving Motivation, and Achieving Strategy detailed in Table I.

**Table 1: Motives and Strategies in Approaches to Learning and Studying**

Approach	Motive	Strategy
Surface	Surface Motive (SM) is instrumental: main purpose is to meet requirements minimally: a balance between working too hard and failing.	Surface Strategy (SS) is reproductive: limit target to bare essentials and reproduce through rote learning
Deep	Deep Motive (DM) is intrinsic: Study to actualize interest and competence in particular academic subjects.	Deep Strategy (DS) is meaningful: read widely, interrelate with previous relevant knowledge
Achieving	Achieving Motive (AM) is based on competition and ego-enhancement: obtain highest grades, whether or not material is interesting.	Achieving Strategy (AS) is based on organizing one's time and working space: behave as a "model student".

(adapted from Biggs, 1987)

In the context of this study specifically, the SPQ was used in a number of ways. First, in terms of the students themselves: I wished to learn more about the students' approaches to learning so both the curriculum designers and teachers could alter curriculum and teaching style. Second I wished to use the results to develop students' self-awareness and encourage style-stretching where necessary. Third, I asked teachers, curriculum designers and moderators of the program to complete the inventory, in terms of their perceptions of where the students place themselves in the learning continuum, so possible areas of misunderstanding could be highlighted and discussed.

#### Method

*Setting:* A four-course, one-semester preparatory program has been used by USQ for 16 years to prepare international students, both national and transnational, for university. The main aim of the program is to develop thinking processes and academic skills to prepare students for university education, while immersing them in the English language through four integrated courses (for details of the program see Galligan, 2004). The SPQ (Biggs SPQ, 1987) was used as part of a wider ethnographic study which took place over a period of one week in Hong Kong in 2004 (Galligan, 2005) where USQ has had a presence for many years. In the current program teachers in Hong Kong and in Australia communicate via email, and workshops in Hong Kong involving both parties has taken place. Moderation of assessment and marking of examinations is carried out by these same Australian teachers who were also the curriculum designers.

*Measure:* As the students were not fluent English speakers, they were asked to complete the Cantonese version of the SPQ obtained from the author. Each item of the SPQ was responded using a five-point scale from 1 = never or only rarely true of me to 5 = always or almost always true of me.

#### Participants

*Students:* There were 24 students (11 male) enrolled in the preparatory program and 23 completed the SPQ. All had completed most of their schooling in Hong Kong, all but two were born in Hong Kong and all were under 25 years of age. All but two wished to study a degree in Business and 18 wanted to do this in Australia.

*Teachers:* Three Hong Kong teachers and five Australian teachers were asked to complete the questionnaire and their background. The Hong Kong teachers were all born in Hong Kong and two had extensive educational experience in Canada. The Australian teachers were born in Australia, UK or France and had between two and 10 years experience in teaching international students in Australia.

#### Procedures

The SPQ questionnaire was given to Hong Kong students, teachers in Hong Kong and teachers in Australia. The same SPQ was given to the Hong Kong teachers to complete in their own time and to five of the moderators of the program in USQ (all had marked and moderated Hong Kong students' papers previously, were involved in curriculum writing for this program and had taught Hong Kong students in Australia). They were asked to complete it according to their perceptions of what the average answer to each item would be for this group of Hong Kong students. Permission was granted from the local program provider to undertake the research and permission slips were signed by all teachers to participate in the study. Students were made aware of purpose of the study and anonymity of the questionnaires. They were assured the questionnaires would not be shown to others (including teachers or administrators) and would not be used with any of their course results. The SPQ was delivered on day three (week eight of the program) in one of the classes. By this time rapport had been built up and they understood more clearly the nature of the study.

#### Results and Discussion

While the numbers are too small in themselves to provide significant results in terms of reliability alphas and dimensions, the results were compared to previous university findings. The SPQ scales (as with previous findings by Biggs, 1996) had one low coefficient alpha of 0.23; two scales had barely adequate alphas of 0.50 and 0.61, and the others of 0.73, 0.73 and 0.79 were considered reliable (see Table II).

**Table II: Internal Consistency Reliability Coefficient Alphas of SPQ Questionnaire for HK Study and Biggs' HK Study.**

Scales	HK n=23	HK (Biggs) n=2338
Surface motivation	0.50	0.53
Surface strategy	0.23	0.65 (0.35 for school)
Deep motivation	0.73	0.60
Deep strategy	0.79	0.75
Achieving motivation	0.73	0.74
Achieving strategy	0.60	0.69

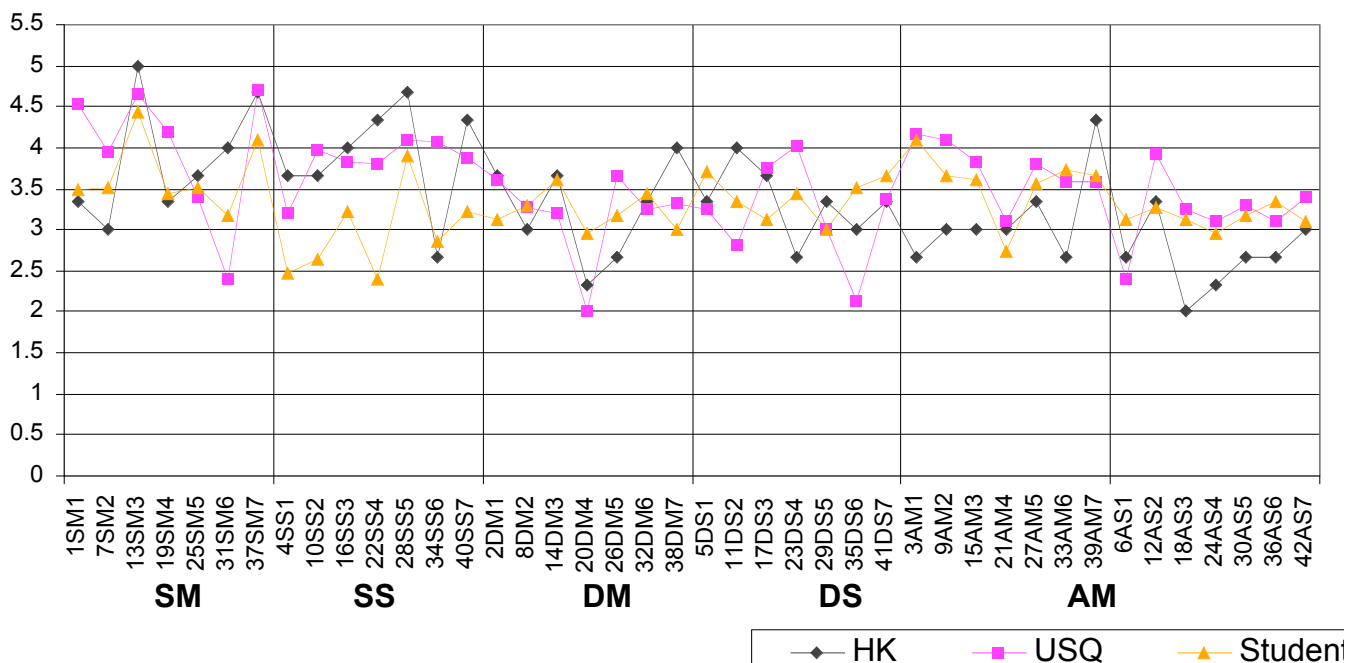
The means and standard deviations of the scales in the SPQ are shown in Table III. When the items are combined to give the six scales, the midpoint of the ratings of the scales is 3 (1 = never or only rarely true of me to 5 = always or almost always true of me). So participants were likely to agree with all the items on the scale except the surface strategy scales. However care should be taken here as the surface strategy dimension is not measuring one factor. Biggs also noted this lack of unidimensionality in the data (Biggs, 1996). Perhaps there are different reasons: fear of failure and the desire for credentials, or a power distance between teacher and student.

While there were only eight teachers in this study, the results of the Hong Kong and Australian teachers' responses to the SPQ are also shown in Table III and Figure 1 for comparison.

**Table III: Mean (and Standard Deviation in Parenthesis for Students Only) of SPQ Scales for Students and Teachers**

SPQ Scales	Mean students (standard deviation)	Teachers (HK) n = 3	Teachers (Aust) n = 5
Surface motivation (SM)	3.66 (0.46)	3.86	4.09
Surface strategy (SS)	2.96 (0.36)	3.91	3.07
Deep motivation (DM)	3.23 (0.47)	3.24	3.94
Deep strategy (DS)	3.40 (0.52)	3.33	3.90
Achieving motivation (AM)	3.58 (0.63)	3.14	3.05
Achieving strategy (AS)	3.16 (0.42)	2.67	3.10

**Figure 1: Mean Responses to SPQ Items By HK Students, HK Teachers' and USQ Moderators (Grouped by Scales)**



While the SPQ scales give an overall impression of the students' orientation and teachers' perception of these orientations, some individual items need to be highlighted especially when there were differences among the three groups. There were three items where student scores were above "frequently true of me" although some large standard deviations are evident (student mean; sd):

- #3AM1. I want top grades in most or all of my courses so that I will be able to select from among the best positions available when I graduate (4.09; 1.00)
- #13SM3. Whether I like it or not, I can see that further education is for me a good way to get a well paid or secure job (4.43; 0.66)
- #37SM7. I am at polytechnic/university mainly because I feel that I will be able to obtain a better job if I have a tertiary qualification (4.09; 0.51)

Answers to items 13 and 37 were also perceived by the teachers to be fairly high (see Figure 1). However for item 3 the USQ teachers were in agreement with the students but the HK teachers were not. There were also five items where the students scored below “true half of the time”. Four of these items were related to the Surface Strategy category.

- #4SS1. I think browsing around is a waste of time, so I only study seriously what’s given out in class or in the course outlines (2.4; 0.95)
- #10SS2. I learn some things by rote, going over and over them until I know them by heart. (2.65; 0.78)
- #21AM4. If it came to the point, I would be prepared to sacrifice immediate popularity with my fellow students for success in my studies and subsequent career (2.74; 1.1)
- #22SS4. I restrict my study to what is specifically set as I think it is unnecessary to do anything extra (2.39; 0.78)
- #34SS6. I find it best to accept the statements and ideas of my lecturers and question them only under special circumstances (2.87; 0.81)

For most of these items the teachers perception of the students’ answers were in disagreement with the students’ results, particularly with question 22, and to a lesser extent 4 and 10 (Figure 1). For item 34 the teachers in HK were in agreement with the students’ results (between 2 and 3) but the USQ teachers were not (between 4 and 5).

In a number of items there was considerable disagreement between HK teachers’ opinions. In some of these cases the influence of the particular subject would be important (item 18: *I try to do all my assignments as soon as possible after they are given out* and item 35: *I spend a lot of my free time finding out more about interesting topics which have been discussed in class*).

Comparing the mean results of the teachers and students for each question, there were five questions where the difference in agreements was more than 0.9. Items 4, 10 and 22 have already been mentioned (differences of -1.27, -1.21 and -1.74 respectively). Another which produced more positive teacher response was: #40SS7. I am very aware that lecturers know a lot more than I do and so I concentrate on what they say is important rather than my own judgement. (3.22 students; 4.17 teachers).

The fifth question which produced a large difference, this time with a more negative teacher response was: #35DS6. I spend a lot of my free time finding out more about interesting topics which have been discussed in class (3.52 students; 2.34 teachers). In the case above, one of the HK teacher’s rank was 5 which may have been subject specific.

Preparatory programs often address students’ learning styles or approaches to learning and incorporating such a questionnaire could provide fruitful discussion points, not only on learning, but also on cultural difference, along Hofstede’s dimensions. For example, consider statement 40SS7: “I am very aware that lecturers know a lot more than I do and so I concentrate on what they say is important rather than my own judgement” and 34SS6 on teacher expertise “I find it best to accept the statements and ideas of my lecturers and question them only under special circumstances”. A positive answer to these at university would reflect a high power distance between student and teacher. In this study, the students’ response was weaker (3.22 & 2.87) than the perceptions of the Australian teachers (3.87 & 4.08) in both statements and the HK (4.33 & 2.66) in the first but not the second statement. This could suggest the microclimate dynamics of the classroom may override normal cultural practice or cultural practices in the classroom are changing in Hong Kong (for discussion on this see Dowson et al., 2003 & Li, 2004).

As mentioned earlier, the SPQ can also be used for individual students to develop a profile. Using the Biggs model which divided the scores into deciles, a five-way grouping was then created. The bottom 10% (--) with next 20% (-) would be considered below average the middle 40% (0) average, and the next 20% (+) with the top 10% (++) above average in relation to the whole class. In Biggs’ recommendations, students with certain profiles may need counselling to promote confidence, to tackle student strategies directly, to improve motivation etc. For example students with low achieving, surface motive and low achieving motive and strategy may be ‘defensive when their competence is being evaluated, especially in a competitive situation and their greatest fear is loss of face resulting from failure’. (1987, p.16).

## Conclusion

In transnational programs, there are many potential areas for misunderstanding between stakeholders, some of which may be based on value differences, and others based on cultural practices. While student approach to learning, highlighted in this study through Biggs’ SPQ, is only one area where misunderstanding can occur, investigating this one issue may give some insight into wider cultural issues which impact on the success of transnational programs.

In this study, the SPQ results suggested these Hong Kong preparatory students exhibited many of the features of other HK university students, but there were a number of differences, especially the particularly low Surface Strategy reliability. Some of this could be attributed to the students’ lack of experience in the tertiary sector and they may not have stable study strategies. The study also showed differences between students’ approaches to learning and teachers’ perceptions of these, and between the Hong Kong and Australian teachers’ perception of students’ replies. If the SPQ is used in this way, differences can be a springboard to encourage dialogue about appropriate pedagogy, between all teachers involved in transnational programs, particularly preparatory or first year courses. The SPQ was also used in what Biggs called his ‘Presage-Process-Product’ model using the student as the focus to discover how individuals differed, how they handled different tasks and learning in different contexts (e.g. in a mathematics as opposed to a communication class; to an Australian as opposed to a Hong Kong setting).

This study did not aim to make generalisations about any specific transnational setting, but rather to investigate how the SPQ can be used in a transnational setting to increase understanding among stakeholders. The SPQ used in this study allowed for better understanding of students’ approach to learning by raising the awareness of students and teachers of the learning processes the students have – are they deep, surface or achieving learners. This awareness raising may also encourage students to develop deeper learning preferences, certainly one of the aims of the preparatory program itself and for universities generally.

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