



McEwan, M. (2013) Investigating academic cultural differences in an international classroom. In: International Enhancement Themes Conference: Enhancement and Innovation in Higher Education, 11-13 Jun 2013, Glasgow, UK.

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Deposited on: 06 August 2013

Investigating Academic Cultural Differences in an International Classroom

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ABSTRACT: Given the large increase in international student numbers (UKCISA, 2012) it will prove beneficial to the international educator to identify any differences in cultural perceptions and expectations of newly registered international students and UK teaching and learning expectations. Knowledge of such differences could be used to inform teaching practice which promotes a smooth cultural transition. This project aimed to measure the 'typical' academic culture of a new cohort of international students compared to that of their UK teacher. Several cultural differences were identified according to Hofstede's cultural typologies (Hofstede, 1986). Students identified themselves as collectivists in a position of low power, whereas their teacher expressed individualist traits and valued a more equal distribution of power in the classroom. These findings can be used to understand *how* different cultural expectations between students and staff may become apparent in an international classroom.

1 Introduction

Culture can be defined as the collection of mutually agreed rules of behaviour or norms, and values which members of a culture hold in high esteem (for example, power). Hofstede (1986) and Hofstede and Bond (1988) describe culture as having five categories: power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity and long term orientations. Power distance refers to the extent to which power is perceived to be distributed equally amongst social hierarchies. Uncertainty avoidance represents a group's acceptance of uncertainty or tolerance to change. The third category of individualism versus collectivism represents the degree to which individual society members are integrated into groups or whether more personal achievements are valued. The gender category is a measure of competitive values (masculinity) over quality of life (femininity). The long term orientation category describes the extent to which a society craves deferred or immediate gratification. These notions of culture can be applied to describe many social setting including the learning and teaching cultures and the collective 'academic culture' of a classroom or discipline (Manikutty, Anuradha and Hansen, 2007). Accordingly, socio and academic cultures can play an important role in teaching and learning, as well as day to day classroom interactions between teaching staff and students (Ryan, 2005).

Socio and academic cultural differences exist not only across international boundaries (Hofstede, 1986), but also across academic disciplines (Becher & Trowler, 2001). For example, Jin (1992: p393) suggests that the academic culture in the UK is characterised by 'critical evaluation, originality, academic freedom and independent thinking' which maps to low power distance and individualism in Hofstede's cultural dimensions. This is in stark contrast to Chinese academic culture which places great respect on academic authority which translates to a high power distance between students and teachers and a collectivist identity using the definitions of cultural dimensions discussed in Hofstede (1986). Furthermore, it could be argued that hard scientific academic cultures value different cognitive domains identified through Bloom's Taxonomy (Bloom, 1956) compared with other subject groups at specific stages in education (Draper, 2005). For example, the pure, hard sciences often focus on problem solving and application at very early stage in education. Accordingly, such potential differences in socio and academic cultures can offer additional challenges to the difficult transition period of any student to UK Higher Education, but particularly for international students for whom the cultural changes may be particularly stark.

The point of transition from one culture to another is a time when cultural differences can play a significant part in the success of an international transition. This transition can lead to a 'culture shock' in any student who is moving between cultures which can impact on students' learning in many ways. For example, Ryan (2005) discusses 'academic shock' where international students have to quickly adapt their approach to learning as their previous approach may not entirely suit the expectations of teachers in the UK. Moreover, the approaches to teaching in the UK may be an entirely new and confusing experience for international students. Ryan (2005) also examines the differing levels of independence of learning between different academic cultures. Similarly, Wu and Hammond (2011) discuss the varying stages of cultural transition for East Asian students studying in the UK where initial language difficulties progress to academic and social 'cultural bumps' before a period of adjustment takes place. It is this period of adjustment (albeit by the students, the academic institution or their teachers) which is vital.

Given that the initial stages of education in a new cultural setting can play a significant role in the success of international student transition, and that any potential cultural differences between students, staff and the discipline at HE level can impact significantly on student outcomes, then it will prove beneficial for any educator of international students to become more aware of the differences in cultural perceptions and the expectation of their international students. Moreover, this paper argues that bridging the gap between students' and staffs' socio and academic cultural expectations should be done collaboratively by sharing academic cultural information, being explicit about expectations, encouraging mindfulness of such differences and raising awareness that certain 'cultural compromises' are necessary by all stakeholders. Ryan (2011) makes comment to a 'transcultural approach' where the cultural baggage and experiences of a diverse international group is utilised as an asset in an international classroom and it is this transcultural approach, combined with a desire to learn and promote mindfulness of cultural differences within any classroom, which may actually benefit all stakeholders in teaching and learning in HE.

2 The Study

This paper reports on a small scale evaluation which measured the expectations of a diverse group of international students on arrival to UK HE regarding their experiences and perceptions of approaches to learning and teaching, awareness of cultural differences with the new UK HE setting and their expectations regarding the relationship with their teacher (myself). This student data was then compared to my own expectations and perceptions of culture in the same regard and a comparison between my own and student data allowed a measurement of the extent to which my practice facilitates a smooth transition between cultures rather than a 'culture shock' for students. Furthermore, the study aims to reveal the extent to which an environment of *collaborative bridging* of academic cultural differences is required in an international classroom, rather than a one-way approach to bridging any perceived cultural gap between students attributes and staff expectations. It is hoped that this study will inform other Higher Education practitioners of potential cultural differences in an academic setting, highlight potential cultural compromises which can be made (and by whom) and promote a continual, culturally reflective approach to teaching and learning which is arguably the essence of a transcultural approach discussed at length in Ryan (2011).

All the students who participated in this study attend Glasgow International College, which is an international pathway college embedded within the University of Glasgow in partnership between the university and Kaplan International Colleges. The purpose of such an institution is to aid student transition into the 'foreign' UK higher educational environment by enhancing both academic and cultural preparation (in the sense of academic culture) and allowing for a

period of cultural adjustment. I am a teacher of physics, maths and statistics at Glasgow International College with a background embedded wholly within UK Higher Education (UK HE).

3 Methodology

A questionnaire was developed which aimed to collect cultural information regarding approaches to learning, approaches to and expectations of teaching, student-teacher relationships and awareness of cultural differences. A version of the questionnaire, adapted for publication, is available in the Appendix to this paper. The first five questions were adapted from the revised approaches to studying inventory (Entwistle and Tait, 1994) and aimed to gain a snapshot of student learning approaches using a five point Likert scale. The next six questions were adapted from the approaches to teaching inventory (Trigwell and Prosser, 2004) but were edited to offer student facing questions relating to their expectations of a teacher and approaches to teaching. These six questions also measured responses using a five point Likert scale. The remaining twenty four questions were designed to obtain the cultural expectations of the respondents within a UK HE classroom according to the five areas of culture discussed in Hofstede (1986), Hofstede and Bond (1988) and further explained in Hofstede (2008) as well as containing elements of the student-supervisor perception rating (Moses, 1985). These twenty four questions therefore measured aspects of socio and academic culture within the classroom using a continuum scale which ranged from one extreme end of a cultural dimension to the other (e.g. individualist to collectivist).

Eighteen foundation and twenty eight pre-masters students participated in this study. I taught the foundation students for four hours per week in a mathematics module, and I taught statistics for four hours per week with the pre-masters groups. These groups included a wide range of students from different nationalities, cultures and academic cultures. It should be noted that the pre-masters group was predominantly of Chinese origin whereas the foundation group was internationally diverse.

In order to obtain an accurate snapshot of students' initial culture, the questionnaire was issued to students in classroom sessions at an early point in their programme (the end of their second week). However, given that some students may have already had some experience of a UK education (either at school or in second language learning) the results of this initial study should be taken with appropriate caution as compromises may have already taken place. In order to have a benchmark and to inform my practice, I also completed the survey.

The student data was collected and processed according to the student groups. This allowed for a separate analysis of the younger foundation students who have most recently transitioned from their native high school system (by contrast the majority of pre-masters students have recently transitioned from their native higher education system). The student responses to each question were recorded on a discrete scale between 1 and 5 and mean responses were calculated alongside the spread in responses. These responses were then categorised (according to the related question) into Hofstede's cultural typology. This approach allowed an overview of the typical *student* academic culture in a GIC classroom at the point of entry.

Any significant differences between student responses and my own were identified and used as a basis to inform the need to encourage collaborative bridging of cultural differences and facilitate a dialogue surrounding academic and cultural expectations. Furthermore, any significant differences between foundation and pre-masters groups were also identified. It is important to note that a full statistical treatment is not appropriate in this instance due to the personally evaluative nature of this study. The processed results for the foundation and pre-masters groups are recorded in Figures 1 and 2, respectively.

Due to the potential wider application of this study (beyond a personal evaluation), ethical approval was granted by the College Academic Director and Programme Leader for Science and Engineering. All students were informed of the study by a formal email and were asked to participate. A discussion was carried out in class sessions where the purpose of the study was communicated to students and at this point, all students indicated that they were happy to participate. At this point, students were asked to sign a document agreeing to participate in the study and further agreeing that the findings of the evaluation could be used for publication either internally within Glasgow International College, or externally where appropriate.

4 Results

Foundation and pre-master students' mean responses were recorded alongside the personal evaluation. The standard deviation of responses was recorded to give insight into the spread of the data. A *notable difference* between student and teacher responses was recorded if responses differed by more than one standard deviation or if responses spanned different extremes of the spectrum. Figures 1 and 2 illustrate only the notable differences between students and teacher for foundation and pre-masters students, respectively. The text at the base of each bar in Figures 1 and 2 indicate the academic or cultural information which a response of '1' indicates. For example, the first bar on Figure 1 shows a teacher response of '1' indicating individualism in comparison to an average student response of around '3' indicating a comparatively collectivist culture.

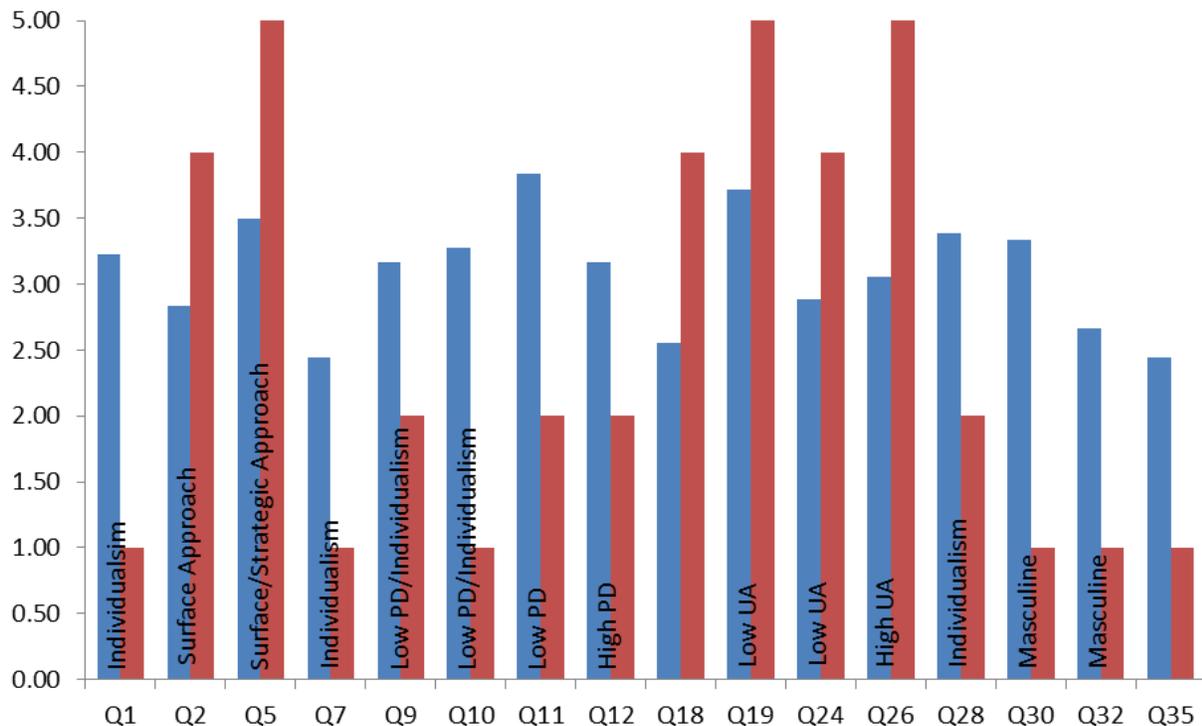


Figure 1: Highlighting the notable differences between teacher (red) and foundation student (blue) responses to the questionnaire given in the appendix.

4.1 Commentary on Foundation Data (Figure 1)

The foundation student responses to the questions related to learning show significant notable differences compared to my own in questions 1, 2 and 5. The main trend suggests that my

students show collectivist traits compared to my individualist values. When focussing on the approaches to learning identified using these responses (based on a similar, but more in depth analysis presented in Mattick, Dennis and Bligh (2004)), the student responses tend towards the middle of the spectrum between surface and deep approaches, whereas my own responses indicate an expectation of a deep approach to learning. This is in agreement with the second hypothesis presented in Manikutty, Anuradha and Hansen (2007) which attempts to correlate collectivism and surface approaches to learning, and suggests that my foundation students have a tendency towards surface and strategic approaches to learning. This may have an impact when I utilise problem solving and application as a tool for teaching and learning as these require deeper learning to be most successful.

Turning to the questions related to teaching, questions 7, 9, 10 and 11 have elicited notably different responses between students and myself. Interestingly, the difference in responses is identifiable in only the questions relating to power distance (PD) and collectivism/individualism. My collectivist students have placed themselves in a position of low power, but my own responses indicate individualism and a more equal distribution of power. This is a significant discovery as collectivist students are more likely to focus on the class performance or average grade, comparing their grades to their friend's, valuing the information their friend gave them and so on. On the contrary, my individualist approach values, encourages and requires independence. Furthermore, the student responses suggest a slight teacher focussed approach in previous classroom experiences since the PD which students expect suggests that they feel the teacher is in control of their learning. However, the low PD which I perceive implies that teaching and learning have more equal importance and that there is greater onus on the student to control their learning (student focussed). This could easily be perceived as a lack of independence and a lack of motivation to learn deeply to a teacher who is not culturally reflective, which could easily impact on the teaching and learning for that cohort. Moreover, Manikutty, Anuradha and Hansen (2007) also suggests that students who display high PD may tend towards surface learning, and combining that with the collectivist traits, students may tend away from a deep approach towards learning.

Finally, the culture based questions demonstrate several notable differences (namely questions 12, 18, 19, 24, 26, 28, 30, 32 and 35). Responses suggest that students have tended towards a small amount of PD (in contrast to the learning and teaching questions above), as have I. Consequently, it seems that the large PD only really manifests when students consider the questions relating to teaching focus on classroom aspects of academic culture such as providing notes, answering questions and so on.

Overall, a number of responses may indicate potential 'cultural clashes' or misunderstandings. The most notable trend is that students tended towards collectivism and higher PD compared to my individualism. Additionally, my responses showed lower uncertainty avoidance (e.g. learning through mistakes), and a masculine dimension (e.g. competitiveness and an intense assessment regime). This highlights some important cultural differences in my international classroom.

4.2 Commentary on Pre-Masters Data (Figure 2)

Firstly, the reader is reminded of the hypothesised cultural homogeneity of the pre-masters group (the majority of students were of Chinese origin). This allows some degree of comparison with Hofstede's cultural typology of China (<http://geert-hofstede.com/china.html>). Interestingly, the responses of the pre-masters and the foundation students show a similar trend for the questions related to learning; questions 1 and 5 showing notable differences between the student voice and my own. As a result, similar conclusions can be drawn here: the student body is a collectivist culture. This matches very well with Hofstede's own findings for

China. Furthermore, the approach to learning which I expect is deeper on the spectrum than students indicate and this again could have an impact when I utilise problem solving and application as a learning tool.

When considering the questions related to teaching, the pre-masters student responses are all closer to my own response than the foundation responses, and only questions 7, 10 and 11 are identified as having notable differences. Overall, the responses indicate that these students are collectivist in a position of low power, compared to my individualism and more equal distribution of power. The differences between students and teacher are smaller for the pre-masters students when compared to the foundation students; however this may still be interpreted as a lack of independence in learning, and a tendency away from a deep approach to learning. This is a vital finding as it is one of the key learning outcomes which programmes at GIC are designed to develop.

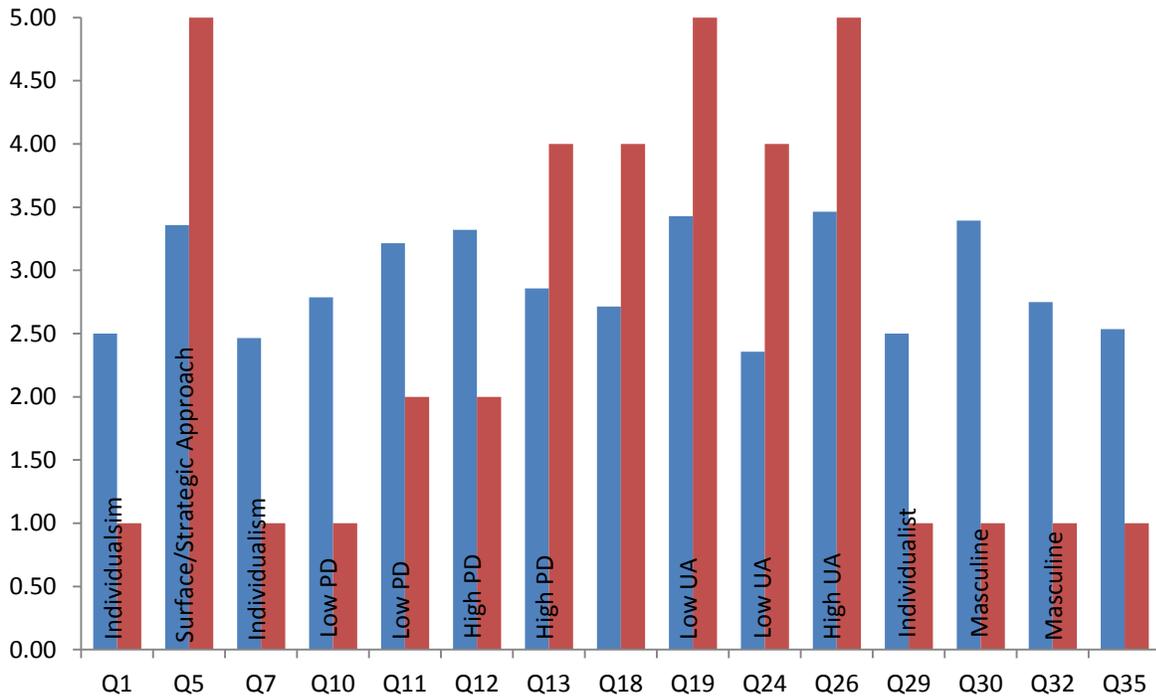


Figure 2: Notable Differences: PM and Teacher - a comparison between teacher (red) and pre-masters student (blue) responses to the questionnaire.

It is worthy to note that the pre-masters data also highlights several areas of notable cultural differences (namely, questions 12, 13, 18, 19, 24, 26, 29, 30, 32 and 35). Again, students have tended to respond with collectivist traits. In comparison, my own responses are individualist and more masculine. More subtly, student PD appears higher. This shows some agreement with Hofstede's cultural typology for China (<http://geert-hofstede.com/china.html>) which suggests a greater PD in China compared to the UK and a more collectivist culture.

4.3 Comparing Between Groups

Whilst the majority of conclusions drawn for the foundation group apply also to the pre-masters group, the responses to cultural questions 1, 13 and 28 have highlighted significant differences between the two groups (with around 95% confidence). In each case, the foundation students have lower UA, more collectivism and a greater degree of surface learning. Again, this is a

significant result as it suggests a more directed approach should be made when dealing with the younger foundation students. Additionally, the foundation students showed more significant differences with their teacher in terms of academic culture (or teaching and learning) compared to the pre-masters group. This could further reinforce the need to promote cultural awareness and mindfulness of academic cultural difference more so when dealing with younger undergraduate and foundation level students compared to older postgraduate students.

5 Conclusions and Reflections

This evaluation has revealed cultural differences between myself and my students and has helped me determine the potential impact this may have on student learning, and my own teaching. The key findings are:

- My students are collectivists and place themselves in a position of low power. As a result, my students show lower independence in their learning than I expect, they place me (their teacher) in a position of high authority and they are teacher centred placing the responsibility on me for their learning.
- My students tend slightly towards surface or strategic approaches to learning (foundation students more so), whereas I value a deeper approach. This could have an impact when I utilise higher levels of Bloom's Taxonomy in my teaching; particularly application and problem solving.

This study promotes transcultural awareness on my part; however my task is to foster a similar awareness *throughout* my classroom and institution (i.e. a two way process). As a result, I should encourage this awareness and facilitate collaborative bridging so that the transition from native to new academic cultures is as smooth as possible. This transcultural approach combined with a desire to promote learning of cultural differences within my classroom will aid all stakeholders in teaching and learning.

In order to develop collaborative bridging, I should design classroom activities which nurture interactivity between students and teachers, promote critical application and allow students to experiment with problem solving. This will allow students to become more aware of my discipline's academic culture and my more neutral position on the power distance scale. Moreover, I should encourage debate within groups, encourage individuals to challenge theories and promote an understanding of the individualist nature of UK academic culture. By understanding that there are different cultural dimensions within an international classroom and by having a greater understanding of exactly what those differences are, I will understand the reactions and responses of my students to a greater degree. This will allow me to have more appropriate and explicit dialogue with students when required. As a result of this evaluation I can help students become more aware of my expectations, the expectations of their future teachers in UK HE and the academic culture of their chosen discipline. This awareness is not only applicable to my discipline of teaching international students in a pathway college, but could be equally applicable to any student in transition to UK HE.

More generally, these findings highlight that students are not a homogeneous group of 'oven-ready' learners. Socio and academic cultural differences, and more general differences in expectations of teaching and learning between students and staff exist and can impact on several key indicators of successful student learning. By highlighting the sharing of cultural information, mindfulness of cultural differences and promoting certain 'cultural compromises' (as opposed to cultural clashes) this report highlight that in spite of such differences, a transcultural approach can foster more engaging, culturally reflective international classrooms which can benefit student outcomes and the teaching experience therein.

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Appendix: Student Survey for Evaluation

Note: the questionnaire presented here has been condensed somewhat for the purposes of publication. The full survey can be requested from the author.

	Question	Response
1 2 3 4	I tend to take anything I have been taught at face value without questioning it When I am taught new things I have to relate them to real life contexts to understand them I generally put in around 8 to 10 hours of study per week per module It is important for me to see why something is true, rather than just accepting that it is true	
5 6 7 8	If I have not understood something when studying, I will try a different method of study My teacher encourages me to think more independently than I had to in my own country If I only learn the information given in lectures then I can get a high grade I expect the teacher to know the answers to any questions I have about the subject	
9 10 11	It is the teachers responsibility to provide me with good notes/resources for this subject It is the teacher's responsibility to set homework and ensure it has been completed satisfactorily It is the teachers responsibility to teach me everything necessary to pass the assessments	
12 13	Relationships with teachers and LSTs are purely professional and personal matters should not intrude The teacher/LST should insist on seeing drafts of students work in order to review them	Response Close personal relationships are essential for successful study It is up to the student to ask for constructive criticism from the teacher/LST
14 15	It is the teacher's responsibility to teach me everything necessary to pass the assessments It is the teacher's responsibility to choose the topic of any project or essay	It is the students responsibility to learn from what the teacher says, but to add to that knowledge with private study It is the students responsibility to learn from what the teacher says, but to add to that knowledge with private study
16 17	It is the teacher's responsibility to meet my needs, even if the class is very diverse and the students all have different needs The teacher should be available after class to answer any questions	It is the student's responsibility to let the teacher know if my needs are not being met Students should not expect teachers to be available after class and may have to wait for an appointment (if at all)
18	The teacher should take into consideration any personal circumstances of students which may affect performance	Students personal circumstances should not be cited as reasons for poor performance to teachers
19	If a teacher asks a really hard	If a teacher asks a really hard question in

	question in class, and no one knows the answer then the question is too hard		class, and no one knows the answer then the students should make sure they study that topic as homework
20	It is the teacher's responsibility to set homework and ensure it has been completed satisfactorily		Students should decide on their own topics of study at home, and it is the students' responsibility to keep up with the teacher.
21	It is rude to question the teacher during class		Questioning the teacher during class is not rude, provided the student tries to be polite
22	I think students should be dependent on teachers		I think teachers and student should treat each other as equals
23	Teachers should initiate all communication		Students should initiate some communication
24	I am happy to guess if I don't know the answer to a question which the teacher asks		I don't like to guess, I wouldn't answer
25	Teachers should make sure students know the right answers		Teachers should make sure that students discuss all possible answers and decide on the most appropriate one
26	Teachers are supposed to know all the answers		It is OK for teachers to say 'I don't know'
27	If I misunderstand something during the class I should ask the teacher to explain		If I misunderstand something during class should ask someone else to explain
28	The purpose of learning is to learn how to learn		The purpose of learning is to learn how to do something
29	Qualifications increase your self-respect		Qualifications allow you to gain higher status and people with high status can buy qualifications
30	Good teachers get good results by any method		Good teachers get good results and are friendly
31	I tend to over-rate my own performance		I tend to under-rate my own performance
32	Failing is a disaster		Failure is a minor problem
33	It is OK for me to communicate with others during class as long as I don't interrupt the teacher (e.g. answering a phone call, emails or notes to other students)		I should never communicate with others in class as the teacher will find this to be rude
34	It is better not to go to class if I think I cannot participate		I should always go to class
35	If I fall asleep during a lecture then the teacher can wake me up and punish me (which will disturb the class)		The teacher should not disturb me if I am asleep as I am not disturbing others