

Learning Hubs: Are they spaces that enhance academic outcomes for students from low uncertainty avoidance cultures?

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Abstract

Hub Central is an area of 10,500 square metres that has built its own unique community that embraces diverse interaction and supports the first year experience. Student input was used in the co-creation of a space and continue to access and evaluate the facility which is designed to promote academic achievement by enhancing the student experience. By reflecting on their own needs, roles and contributions, a space has been delivered that is multifunctional (or could be described as somewhat unstructured), allows repurposing and fosters students developing their own approaches to interaction.

But does this type of space work for everyone? Hofstede (1986) states that uncertainty avoidance as a characteristic of a culture refers to the extent to which people within such a culture feel nervous about situations which they perceive as unstructured, unclear or unpredictable. This paper aims to explore if uncertainty avoidance is a positive or negative influence in flexible learning spaces such as Hub Central. The outcome of the paper is to provoke thought and to challenge the application of theoretical models (using uncertainty avoidance as an example) and the application in student learning spaces.

Keywords

Theory, Models, Hub Central, Uncertainty Avoidance, Learning Space

Introduction

In postulating attributes, and exploring good practices in supporting positive outcomes for students at university, our practice in the workplace is guided by a number of conceptual models of 'impact' (e.g., Tinto, 1999; Chickering & Reisser, 1993; Pascarella, 1985; Weidman, 1989). We often then extend these to include looking at Cultural models in Higher Education. Hofstede's cultural dimensions theory is a framework from where we source knowledge when designing support for academic outcomes. A number of university spaces and programs unintentionally develop an approach that sees culture become a source of difference rather than of diversity or synergy. Developing spaces and programs that promote diversity and common or shared experience seem to provide a stronger focus on positive academic and personal outcomes for students.

The models we use in higher education share common ground in that they all assert that the impact of university on nearly any student outcome is the result of multiple influences. At a minimum, these multiple influences include: student demographic and pre-tertiary education background; organizational or structural characteristics of the institution attended; students' academic skill developments; where a student is in the student lifecycle; and, students' non-academic experiences. These influences are then all mediated by other attributes, one example being 'cultural background'. A positive academic outcome for students is the undoubtable provided by seeking best practice and support by utilising knowledge around a combination of these characteristics and attributes.

Hub Central is a student learning space with a mission to provide both positive academic outcomes and a superior student experience. One of the observations made is that students from all cultural backgrounds tend to work collaborative in the 'Hub' space towards shared academic goals. If we consider Hofstede's **Uncertainty Avoidance Index (UAI)**: "*a society's tolerance for uncertainty and ambiguity*", the use of the space throws up some interesting questions. The Hub has minimal rules, tolerates flexibility to maximum and can be different everyday of the year. Furniture is moved by students to meet their needs, food is welcome everywhere, there are

few formal rules. The space actively promotes flexibility to meet the need of students at any given period in the student lifecycle. Hofstede's framework would suggest that students from high UAI cultures should in theory find this uncertainty stressful and have a negative emotional response to the space. The Hub runs on a student Governance or co-creation model so one may also expect that students from high UAI cultures may try to minimize the occurrence of unknown and unusual circumstances and to ask to have more structure by asserting the implementation of rules, and regulations in the Hub.

I recently revisited some of the classic Hofstede critics including my more recent favourite, *The Construction of the Modern West and the Backward Rest in Hofstede's Culture's Consequences*, Fougere (2007). Without entering this debate, it is worth noting that other researches such as M. L. Jones (2007) have claimed that with the rapidly changing global environment, Hofstede's work and main study in particular is too old to be of any modern value. Hofstede countered such comment by asserting that he believes the cross-cultural outcomes were based on centuries of indoctrination and that culture will not change overnight.

In explaining why students on mass use the Hub space and appear relaxed, working well across cultural groups, I started to look towards the impacts of globalisation as highlighted by Fougere. Thomas Friedman, author of *"The World is Flat: A Brief History of the Twenty-First Century,"* gives a very detailed description and explanation of globalisation through circumstances he calls "global flatteners." According to Friedman (2007. p.8), global flatteners are worldwide events that have closed gaps between countries and increased unity among humans, nations, and cultures: "*We are now connecting all the knowledge centers on the planet together into a single global network, which . . . could usher in an amazing era of prosperity, innovation, and collaboration, by companies, communities, and individuals*" . Flattening also occurred at the same time as a rise in '**Cultural Intelligence**', the capacity of individuals to adapt to different people from diverse cultures and the ability to manage this interconnectedness harmoniously and productively (Earley, Ang, & Tan, 2006)?

Given the above premise, if we assume there has been some 'flattening' one could investigate if there is an emergence of a new common cultural identity of '**a student**'. We are happy to acknowledge the larger social culture and that universities own culture results from conscious and unconscious perspectives, values, interactions, and practices, and it is heavily shaped by the University's own particular institutional history. If we extend this to the individual, we can ask is there a common cultural identity and similarity of being a student that is as significant as other cultural difference?

If we look at these questions in the context of Hub Central and within current models of best practice in learning space design we have the ability to explore some new approaches to providing a student space that enhances academic outcomes for students from low uncertainty avoidance cultures.

In describing Hub Central as a 'space' we can use the framework provided by Souter, Riddle, Keppell, & Sellers(2010). They have developed a model that proposes seven principals of learning space design which support a constructivist approach to learning and support a learning environment that is student centred, collaborative and experiential. The seven principals are; Comfort, Aesthetics, Flow, Equity, Blending, Affordances, and Repurposing. Reberger (2012) added an eighth principal 'Ownership' to describe a further important concept in learning space design. Milne (2006) has also applied this framework to model the student experience and how it relates to space.

Any one that has visited Hub Central would acknowledge that it supports a vibrant and engaged learning community and offers students greater motivation and reward for their use of the space. Brown & Katz (2009) encouraged designers and leaders to broaden their design process, by using them to make strategic decisions and consider relationships between people and the experience behind products and services. They argue that design thinking processes need to be human centred, iterative processes that operate in the spaces of ideation, inspiration, and implementation, only constrained by desirability, feasibility, and viability.

Kuh, Kinzie, Schuh & Whitt, (2005) attributed student engagement to student persistence and participation in learning and social activities, which in turn is argued to be strengthened when institutional resources and values are directed to enriching the educational experience of students. Focus groups with student users have suggested the Hub is lot of different things to different people or at different times of the year. It is a comfortable environment for exploring and sharing; a link between the physical boundaries of the classroom and

the new virtual boundaries of technology; a space that encourages knowledge generation by students or the active construction of knowledge by the learner; a space that enhances, motivates and promotes authentic learning interactions; and, a threat to 'traditional' teaching approaches and methods (like the book was to the slate)

Through all the discussions and consultations 'co-creation' developed in the 'Hub Project', as a process or framework in decision making for the University. The outcomes of the Hub project bring you back to a familiar piece of research. Chickering & Gamson, (1987) classic work on principles for good practice in undergraduate education which informed readers that the qualities a good educational environment must have, are: 1) a strong sense of shared purposes; 2) concrete support from administrators and faculty leaders for those purposes; 3) adequate funding appropriate for the purposes; 4) policies and procedures consistent with the purposes; and 5) continuing examination of how well the purposes are being achieved. Co-creation has allowed the students to identify these principles themselves and thus have ownership in both the concept and the space. Hub Central has produced a student centric environment that has many benefits for both student and staff. The space has created opportunities for students as well as academic and professional staff to celebrate and reflect on their shared purposes. It demonstrates that a physical space can facilitate student engagement by providing a connectedness for students, to each other, with staff and with the University.

In applying Hofstede (2001) work to reflecting on the space at Hub Central, using his focus and model on determining the patterns of thinking, feeling and acting that form a culture's mental programming is useful. He conceptualized culture as 'programming of the mind' in the sense that certain reactions were more likely in certain cultures than in others, based on differences between the basic values of the members of different cultures. If we apply this state of mind to Hub Central it brings to mind the following 2 assumptions which the paper will further explore:

1. Students from **low** Uncertainty Avoidance cultures would feel more comfortable, and like the flexibility and lack of rules at Hub Central.
2. Students from **high** Uncertainty Avoidance cultures would not like or use Hub Central as they do not like or try and avoid ambiguous situations and would prefer to work in a more structured and predictable environment.

Methodology

A survey was designed on Survey Monkey asking 8 questions. Staff at Hub Central asked students during or whilst waiting for a service transaction and when working in the space if they would like to complete the questions. A total of 227 students using Hub Central volunteered to complete the survey. Not all students answered each section of the survey so the number of responses differs for each question.

In defining what are high or low UAI scores an email to the Hofstede Centre [<http://geert-hofstede.com/faq.html>] suggests; *the scale runs from 0 - 100 with 50 as a midlevel (with a possibility of scoring above 100 or below 0). The rule of thumb is that if a score is under 50 the culture scores relatively LOW on that scale and if any score is over 50 the culture scores HIGH on that scale.* The range of UAI score based on countries of respondents to our survey was from 8 to 95 and is described in table 1.

Ethnographic research is a useful tool in analysing people's perspectives with regard to how they perceive and make sense of the world. Ethnographic observations in particular can give the insight into how identities are constructed, maintained and communicated with others (Marvasti 2004). The ideas for this paper are drawn from an ethnographic approach to how staff observe students in the workplace 'Hub Central' as a means to gather ideas and reflect about student use and how to improve the experience and support of academic achievement. Further to using this method to generate ideas and questions ethnographic observations were used in analysis of how students responded to the survey. Staff talking with students had the overall impression they were keen to complete the survey and in general had a very positive attitude towards Hub Central. The similarity of opinion from staff that the response is positive is created by mutual agreement by observing non-verbal behaviour such as smiling and gazing whilst completing the survey. In terms of verbal behaviour, respondents often used reassurance and agreement markers such as *yeah, great, and happy to.*

Results

A total of 222 of the 227 student surveyed representing 31 countries nominated the country they were from (which was the last question presented in the survey), as described below in table 1.

Table 1. Students' Country and Country Uncertainty Avoidance Index Score (UAI)

Country of Respondents	UAI Score	Number of Respondents	Low UAI	High UAI
Singapore	8	14	LOW UAI	
Hong Kong	29	5	LOW UAI	
Sweden	29	4	LOW UAI	
Vietnam	30	1	LOW UAI	
Great Britain	35	5	LOW UAI	
Ireland	35	1	LOW UAI	
Malaysia	36	12	LOW UAI	
Myanmar	36	1	LOW UAI	
China	40	44	LOW UAI	
India	40	3	LOW UAI	
United States	46	2	LOW UAI	
Canada	48	1	LOW UAI	
Indonesia	48	5	LOW UAI	
New Zealand	49	4	LOW UAI	
South Africa	49	2	LOW UAI	
Norway	50	3		HIGH UAI
Australia	51	58		HIGH UAI
West Africa	54	2		HIGH UAI
Iran	59	2		HIGH UAI
Thailand	64	3		HIGH UAI
Germany	65	3		HIGH UAI
Lithuania	65	1		HIGH UAI
Brazil	76	16		HIGH UAI
Chile	80	1		HIGH UAI
Colombia	80	2		HIGH UAI
Korea	85	9		HIGH UAI
France	86	4		HIGH UAI
Spain	86	1		HIGH UAI
Japan	92	11		HIGH UAI
Russia	95	2		HIGH UAI
Total		222	104	118

Respondents were then asked to reply yes or no to the question, "Are you happy with how the hub works as a learning space?" These Results are shown below in Figure 1.

Figure 1 shows that the majority of students were happy with how the Hub works as a learning space. It is somewhat surprising that almost double the number of students from low UAI index countries were not happy compared with those from high UAI indexes (5% low to 10% high UAI). This is somewhat counter with what we would have predicted when using Hofstede's tolerance for uncertainty and ambiguity mindset as a framework.

Are you happy with how the hub works as a learning space?

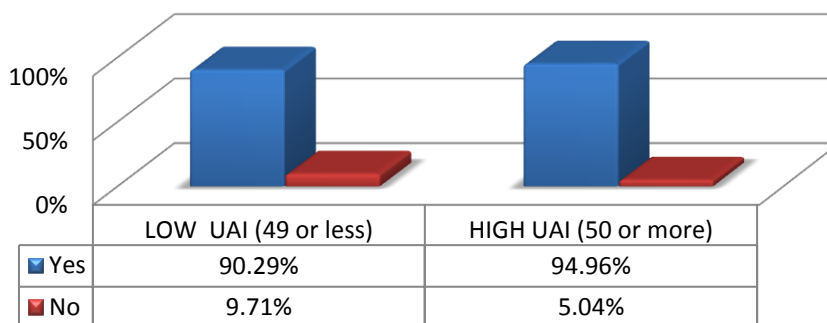


Figure 1. Low and High UAI Country breakdown of student responses to gauge happiness with the learning environment

Respondents were asked to choose one of three options in the next question based on rules. Does the hub need; 1) More Rules, 2) Is okay as is, 3) Less rules.

Rules: Does the Hub Need?

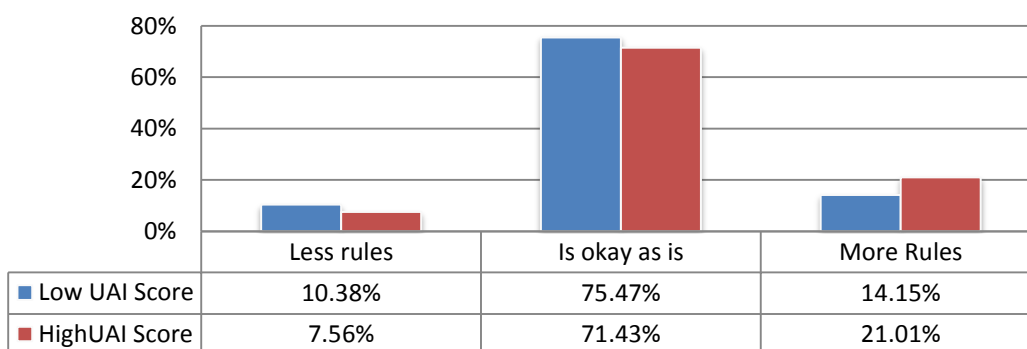


Figure 2. Low and High UAI Country breakdown of student responses to gauge if they feel about rules

Figure 2 is supporting the expected outcomes from Hofstede’s framework with students from low UAI countries preferring fewer rules and students from High UAI countries preferring more rules. It is worth noting that the majority of students are happy with the flexibility of the Hub space as it currently run.

Structure: Does the Hub Need?

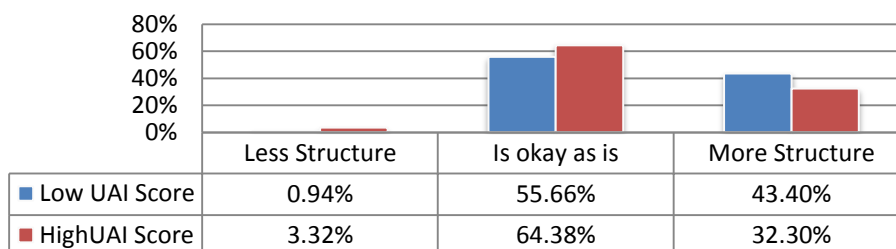


Figure 3. Low and High UAI Country breakdown of student responses to gauge what they feel about Structure

Respondents were next asked to choose one of three choices based on structure. Does the hub need; 1) More structure, 2) Is okay as is, or 3) Less structure.

Figure 3 is interesting as it does not support the expected outcomes from Hofstede’s framework with students from both High and Low UAI countries preferring more structure. Again whilst noting that the majority of students are happy with the flexible structure of the Hub space as it is currently run, a large number would like to see more structure. It is also interesting that over 10% more students from Low UAI countries would like more structure than those from High UAI countries, this is counter to what would be expected when using Hofstede’s framework.

Respondents were asked to reply ‘yes or no’ to the question, do you like that you can organise the space in the Hub to meet your needs on any given day?

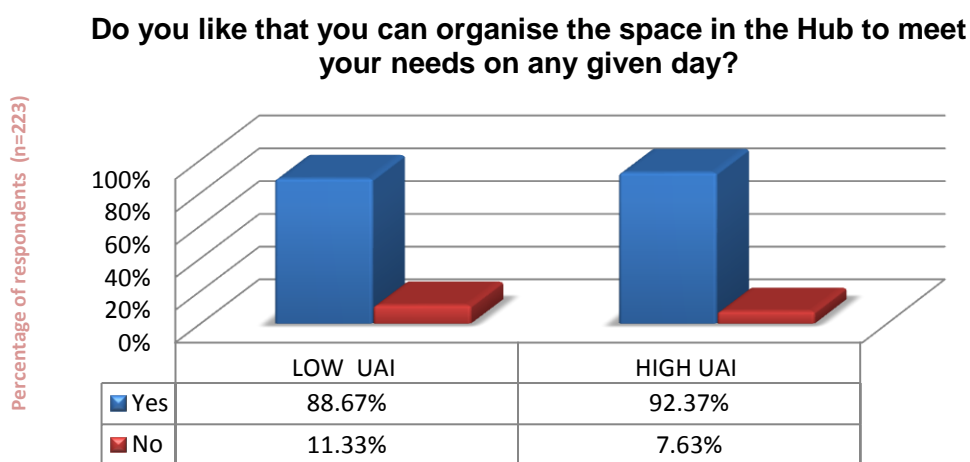


Figure 4. Low and High UAI Country breakdown of student responses to the question, Do you like that you can organise the space in the Hub to meet your needs on any given day?

As can be seen from figure 4 the overwhelming majority like the flexibility of the space. There were around 4% more students from high UAI Countries than low UAI countries who did not like it, again counter to Hofstedes Framework. Respondents were asked to reply yes or no to the question, is there a 'student culture' and does this define the ideas, customs, and social behaviour in the Hub?

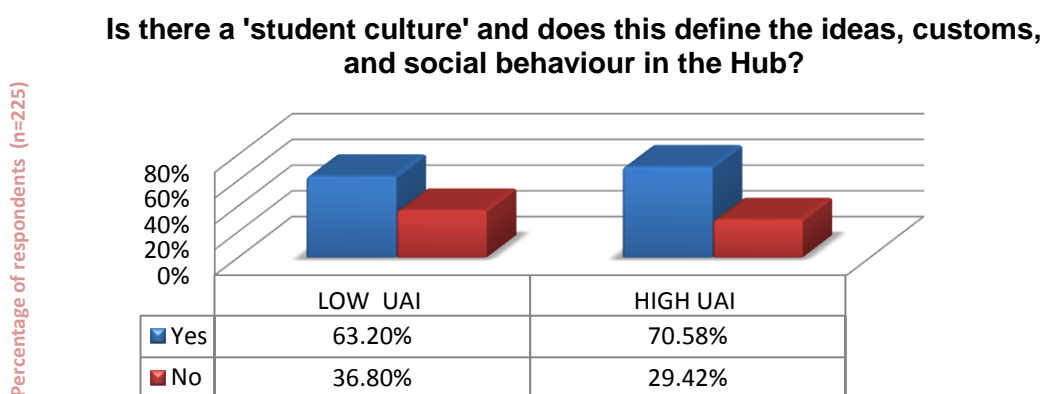


Figure 5. Low and High UAI Country breakdown of student responses to the question, Is there a 'student culture' and does this define the ideas, customs, and social behaviour in the Hub

Figure 5 shows that the majority of respondents believe there is a ‘student culture’ that operates.

Respondents were asked to reply yes or no to the question, do you believe that technology has closed gaps between countries and increased unity among students, nations, and cultures?

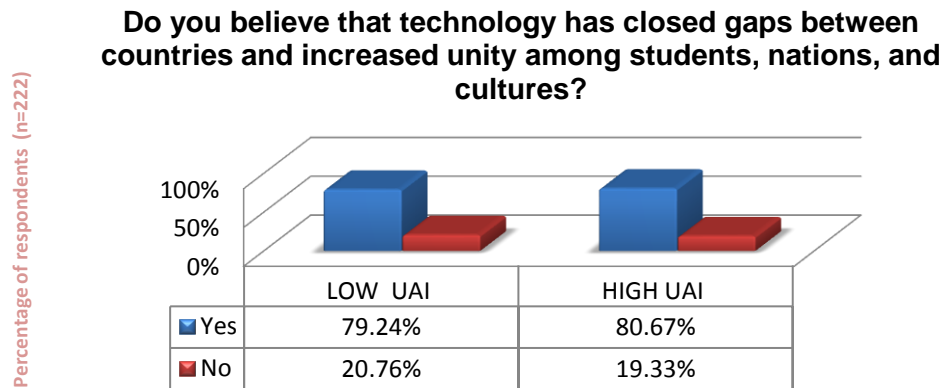


Figure 6. Low and High UAI Country breakdown of student responses to the question, Do you believe that technology has closed gaps between countries and increased unity among students, nations, and cultures?

As seen by figure 6 there was basically no difference between the 2 groups on their opinions about the role of technology in facilitating unity. Hub Central is a technology intensive space and it is interesting that this is seen as a common ground in promoting culture.

Finally students were asked to rate their capacity on a four scale selection about using the space.

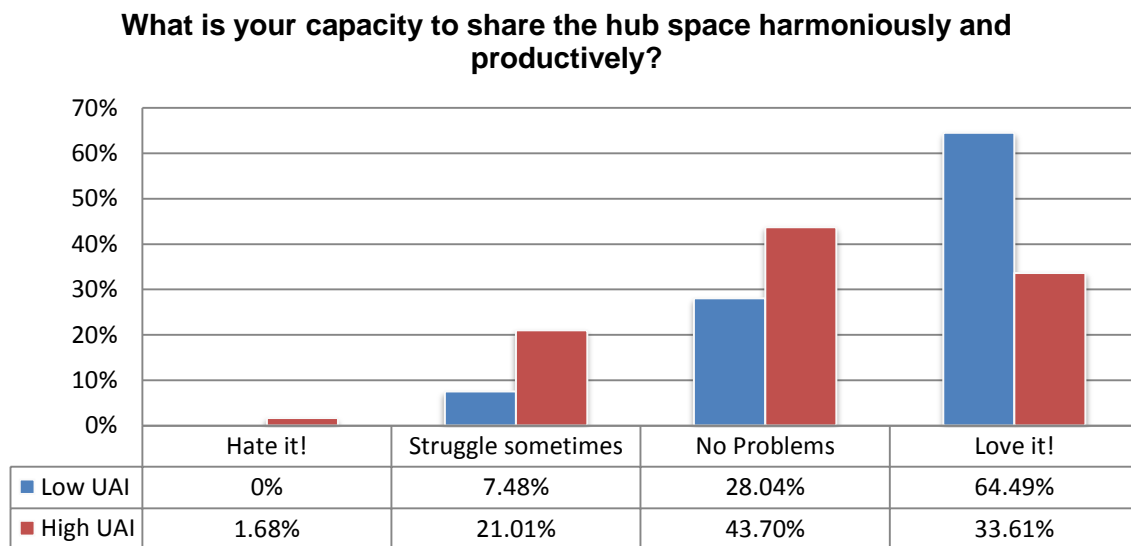


Figure 7. Low and High UAI Country breakdown of student responses to the question, what is your capacity to share the hub space harmoniously and productively?

Figure 7 highlights that as Hofstede’s framework would predict, those students from low UAI countries loved the concept of shared space, whilst students from High UAI countries were more conservative, yet had no problems with the concept.

What is your capacity to study with people from diverse culture?

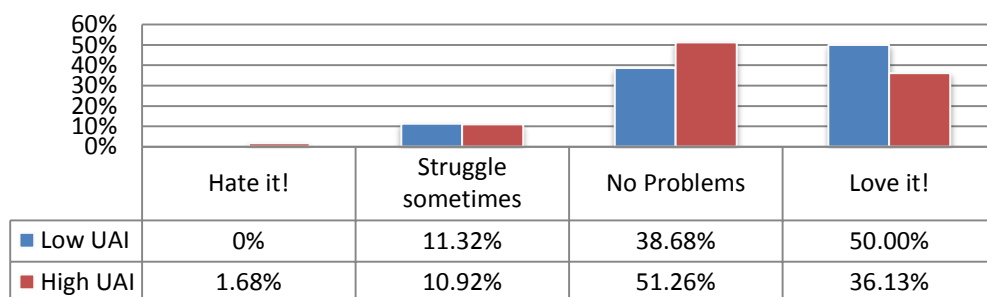


Figure 8. Low and High UAI Country breakdown of student responses to the question, what is your capacity to study with people from diverse culture?

Figure 8 is similar to figure 7 in that it highlights that those students from low UAI countries were more likely to 'love' the concept of diversity in the space, as opposed to the students from High UAI countries were more conservative and in general had no problems with the concept.

What is your capacity to tolerate uncertainty and ambiguity?

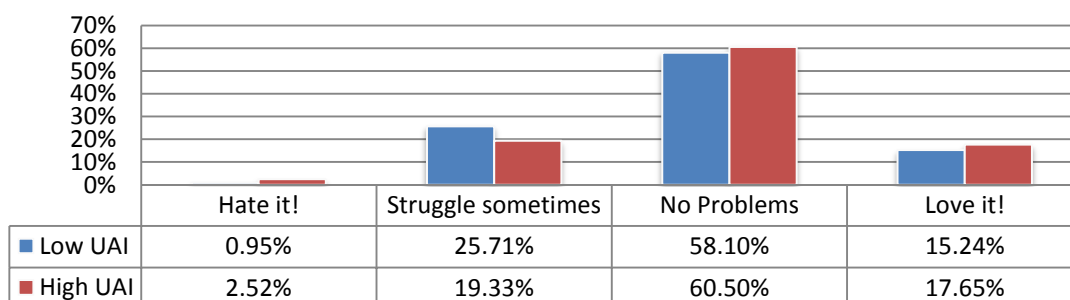


Figure 9. Low and High UAI Country breakdown of student responses to the question, what is your capacity to tolerate uncertainty and ambiguity?

What is your capacity to deal with occurrences of unknown and unusual circumstance?

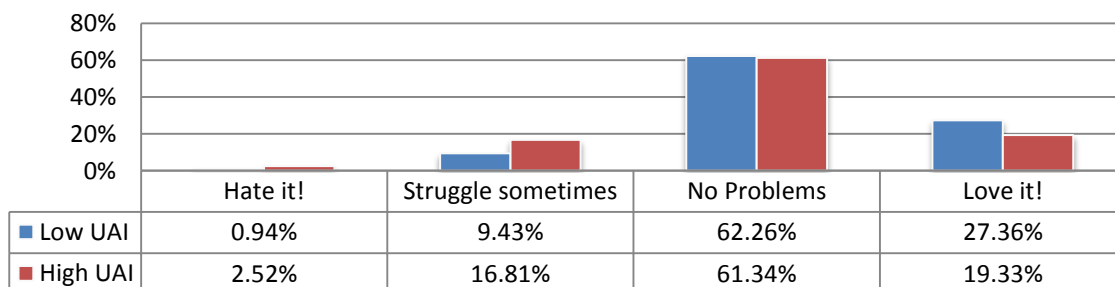


Figure 10. Low and High UAI Country breakdown of student responses to the question, what is your capacity to deal with occurrences of unknown and unusual circumstance?

Both figures 9 and 10 show little differences between low and high UAI scores.

Conclusion

We can conclude from our sample that students do actually like how the Hub is run as a study space. There was support for Hofstede's framework and there was support for flattening and shared culture as a result of globalisation and technology. Not unexpected, however, in using Hofstede's model to look at how students use the space in Hub Central at the University of Adelaide I was also showcasing why we use theory or models to explore and describe what we do?

I would assert that theory and models help us with our professional identity. As educators we need to demonstrate we work from an empirical evidence base that gives us knowledge, expertise and provides a language and communication scheme for our community of practice. Theory and models help us make sense of the many complex things we observe and see. They help make the observations we make, and the thoughts we have, manageable, understandable, meaningful and even sometimes practical and transferable. We can look at a space like Hub Central and go 'hang on this is different' and they give us a reference point to challenge our observations from.

In asking the question, Learning Hubs: Are they spaces that enhance academic outcomes for students from low uncertainty avoidance cultures? I have both explored the opportunity and the possibility to answer my own informal theories about students, culture, space and how to work best with students. These theories may not always be a conscious or clear part of our awareness (Komives et.al. 2003) but they are present. In trying to answer my question, I believe that firstly I have a professional responsibility to try and understand and communicate with others that I have observed something unique and I will try to the best of my ability to communicate this. I should not be afraid that I am wrong, I should hope my questions, observations and conclusions promote discussion and lead to innovation in support that will lead to more positive outcomes for the student's we serve.

The data collected allows me to communicate a couple of key points. Hofstede's model is a good reference point to look from. For both the supporters of the theory and those who question it, I have gathered support for there research. There does appear to be common ground with technology allowing a global shared experience and exposure to a common culture. Hofstede's response that culture is developed over many years and is robust also holds strong in some areas, it seems to work in supporting some of our questions and the student's responses.

When I look from my ethnocentric methodology I find that common ground and similarity is a much better point to start from and move forward than a deficit model that highlights difference. However, it is worth knowing about difference so I can place the individual's response to the space at Hub Central in a context that I can communicate with others. My conclusion is Learning Hubs are spaces that enhance academic outcomes. As for UAI a useful attribute to be aware of, no hard call on its effect in the space.

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