ABSTRACT
Students starting their Product Design studies in Australia next year will be graduating into a very internationalised profession. Production has moved increasingly offshore, markets are increasingly global and collaborations are increasingly made across country boundaries. Higher Education programs have been responding slowly to these changes but a more fundamental shift in thinking is needed to redesign Product Design education for the realities of the new environment for Australian design graduates. Internationalisation of the curriculum cannot be limited to including examples of designs from other countries and giving students opportunities to take part in projects abroad, it needs to be extended so that students understand cultural difference. Understanding the reasons behind production values and behaviours in different cultures needs to be overt in the Australian Product Design curriculum, providing strategies for graduates joining companies that are finding themselves increasingly dependent on international relationships.

Using the relationship of Australia with China as an example, this paper discusses the issues for Australian Product Design educators in identifying and exploring the culture based attitudes, design values and behaviours that students bring to design and those of the design and production partners they will potentially work with during their design career.

Keywords: Asia, culture, attitudes, internationalization, curriculum.

1 INTRODUCTION
The international education sector contributed $16.3 billion in export income in 2010–2011 to the Australian economy [1], but last year there was a $3 billion downturn, caused by the strength of the Australian dollar, negative publicity relating to the experiences of international students in Australia, and increased competition from European and American Universities setting up campuses within Australia’s target market countries. In 2009 22% of Australian students were international, and yet the impact on curriculums was not evident [2]. In fact, internationalisation is still not a significant factor in higher education policy not only in Australia but in the UK as well: “Internationalisation as a concept remains marginal and insignificant even in the light of such changes in the student population” [3]. According to the Australian Government of Statistics “many educational institutions rely on the income from full-fee paying international students to assist in the provision of quality education to all students, both international and domestic” [1], which means it should be a central part of policy, with the improvement of the student experience for International students taken seriously. The recently appointed president of the Council of International Students Australia, Arfa Noor, warned Australian Universities of a growing need “to ensure that they are good enough to attract the best students” [4]. If Australia is to reclaim its market sector then it needs to re-evaluate its approach with a renewed respect for the experience of the students it is aiming to attract. Contributing to this would be the provision of more overtly internationalised curriculum and teaching methodology.

Asian countries are the dominant target markets for Australian Universities and with the growth of manufacturing in China, where it is described by the Chinese Government as the ‘pillar of the economy’ [5] with ‘technical progress’ identified as a driver, it is not surprising that students from China and other Asian countries have been attracted to nearby Australia’s established Product Design education programs. However, if Product Design education in Australia is to retain an international contingent, a re-evaluation of approach is needed that responds more professionally to the direct needs of those international students beyond learning in Australia, that recognises and respects their
backgrounds and takes into account the situation they will return to work in. It is no longer sufficient to simply ‘allow them’ to take part in an education system set up for domestic students. Beyond this imperative, there is also the reality of the changed professional world that Australian domestic Product Design graduates now operate in. This should be impacting on both the design curriculum and the relationships and interaction of domestic students with their international peers. Noor told the 2012 conference for international students in Australia that the problem was that the talk was ‘too much about the finances’. Universities tend to see the contribution of international students in terms of income, when instead they should be seeing their contribution in terms of the value they bring to enriching the curriculum. Australian Product Design educators should recognise the benefits of the wealth of cultural knowledge international students bring with them - knowledge that is increasingly essential for domestic students – because the production systems for Australia are predominantly based overseas. By creating a curriculum and teaching methodology that genuinely rethinks how to meet the needs of international students, so could Product Design educators also be creating a contemporary, relevant curriculum and approach that is best suited to prepare domestic students for graduation and future design practice. University planning often refers to a ‘global outlook’ as a graduate attribute (e.g. Leeds University in the UK and Griffith University in Australia), but according to Leask “deep engagement with the internationalisation of the curriculum in the disciplines remains a specialist activity that occurs at the periphery of other academic activity” [2]. Leask argues that Agnew’s study on ‘Internationalisation of the Curriculum’ concludes that institutions should take the “specific qualities of the academic disciplines into consideration when they develop strategic plans for internationalisation” [2]. Leask’s ideas build on the work of Klein and of Becher on the influence that disciplinarity exerts over organisations and the production of knowledge, and the role of discipline groups as global communities with distinctive cultures, their own way of interpreting the work in their discipline, their own way of understanding, shaping and coping with the world. Product Design communities transcend national boundaries and have distinctive, discipline specific cultural norms that need to be acknowledged and mapped for a discipline specific global outlook and then the development of internationalisation in the Product Design curriculum could be more effectively addressed within that global community.

2 THE REALITY OF INTERNATIONALISATION FOR PRODUCT DESIGNERS

In Australia, Product Design graduates currently have two options. Either they move overseas, or they work in design companies or manufacturers that have the majority of their production taking place overseas. After a reliance on the export of resources and service industries, such as higher education, the Australian Government is discussing reviving manufacturing in the Government $1 Billion Jobs Plan [6]. However it is currently not even listed as one of the important elements of the economy in some of the States, such as Queensland. In the meantime, the Government has introduced greater financial assistance for students wanting to undertake part of their study in Asia in the Higher Education Support Amendment (Asian Century) Bill 2013, acknowledging that students need to be more overtly embedded in the region to improve the economic prospects of Australia long term. Recognition of ‘The Asian Century’ by the Australian Government makes the importance of the role of Asia for the future of Australia overt. Product Design education needs to make the same shift in thinking for the benefit of their future graduates. If Product Design education in Australia is re-evaluated from this new perspective, then there will be a shift in priorities that will affect everything from curriculum to the promotion of supporting electives. For example, just as in the nineties Japanese was the recommended language to learn as a Product Designer, and Italian was more useful in relation to innovative design and production, so now Mandarin would arguably be the most useful language for a domestic Product Design student to learn. In the current market, a graduating Mandarin speaking international student would be more useful to a design company whose product is made in Asia than a comparable non-Mandarin speaking domestic graduate. Essentially, international students studying Product Design in Australia may well be in more demand in Australia than local graduates unless domestic students learn how to communicate and operate in Asia.

3 BECOMING AUSTRALASIAN-CENTRIC

Based on recommended texts, currently Product Design programs in Australia appear to be predominantly taught from a European perspective, both in theory and practice. There is limited evidence of a regard for Asian-centric texts or suggestion that Australian students would benefit from
learning about Asian design practice. Obstacles to changing practice are mostly based on preconceptions manifest in curriculum content and teaching methods arising from a ‘Western’ bias. Some Australian preconceptions currently include judgements on the quality of production capabilities by Asian partners [7], the mistaken idea that Australian technology is more advanced than, for example, Chinese and that the Asian ‘production advantage’ is purely labour rate based, and the mistrust of some Asian production practices. The reality is many preconceptions are outdated, as high technology companies in China have received 15% corporate tax cuts since 2008 leading to an increased incentive for research and development over Australian counterparts [8].

3.1 Integrating global values
Residual cultural imperialism is still, in many ways, the backdrop against which much Product Design education operates. International Universities, such as Liverpool with the Xi’an Jiaotong Liverpool University and University of Nottingham Ningbo in China, have permanent campuses in Asia that employ lecturers to deliver the degrees there independently but with accreditation by the UK universities. Some Universities, such as Griffith in Hong Kong, have parallel programs running overseas, where the same academics deliver both programs and standards can be compared. It could be argued, however, that, just as the UTAS Asian studies course separates rather than unifies and informs in terms of internationalisation, there is a danger that repeating the program without making it a collaboration will do the same. Lecturers from the Australian campus at Griffith deliver courses into the Hong Kong University, but not visa versa, suggesting the Australian input is valued over that from the Hong Kong partners. There are also situations where Universities have partner feeder institutions where the students in a country such as China, can study for a year on a similar program and then gain entry into the Australian partner university (e.g. Shandong University of the Arts in China and Griffith). There are fundamental differences in approach between students brought up in Australia imbued with western values and practices and those brought up in China that require a sensitive response both on an individual and group level.

3.2 Recognising individual values and attitudes
While the term ‘Asia’ may have some value as a broad geographic delineator, it does not delineate a culture, and the diversity of ‘Asian’ culture is not contained within national boundaries. Many Asian nations contain a diversity of cultures, and China is no exception. Within the encompassing national culture local influences create their own sub-cultures. Anyone from a Western education system teaching Chinese students would soon appreciate the difference between a student from ‘the provinces’ compared with a student from one of the expanding industrial cities of the south and east, or compared with a student from Hong Kong. The Western classroom environment, with its associated expectations of individual initiative and unsolicited response, can be confronting, confusing and even distressing to Chinese students from provincial centers. There is an expectation that the ‘professor’ should spell out what they have to do, that they then go away and do it, and when they submit the results they will receive a good grade. It is very confusing for students when they are expected to take the material offered, critically assess it, and then produce their own unique response. It requires a major shift of mental framework that lecturers need to be aware of and work with the students to help them to understand and respond to.

4 CREATING A SENSITIVE LEARNING ENVIRONMENT
Sensitivity to the emotions of others is implicit in the way many Asians communicate, but not so apparent in how Australians communicate. In Western societies, the speaker transmits information and generally takes responsibility for any miscommunication. The speech is direct and specific. In Asian societies, points may be made indirectly and the hearer is expected to interpret the content for implied meanings. Australians may become exasperated by the seemingly vague utterances of many Asians, while Asians, by contrast, may be surprised and even offended by the bluntness of Australian speech. “The heart of the problem lies not in the politeness of one culture or another, but rather in the differences in expectations and social norms of the two” [9]. It has been argued that, “Tertiary educators have a responsibility to incorporate English language and communication training to better equip international students whilst they are studying in Australia” [10]. The tradition of foregrounding the group in Asian cultures, rather than the individual, along with the concomitant desire for group cohesion, is a significant element of how Asian teams function. The cultural bias dominant in
Australian society psychological constructs has been highlighted by the inadequacy of the widely used personality assessment instrument known as ‘the Big Five’ or ‘OCEAN’ [Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism.] when applied to East Asians. Chinese psychologists have suggested amending it to include an ‘interpersonal relatedness’ factor that covers Chinese constructs such as harmony and flexibility [11].

Consideration of ‘the bigger picture’ and long term effects form the essence of Asian thought, and reflect the holistic thinking of Asians compared with the analytical, atomistic thinking of Westerners that dominates Australian attitudes. The very way in which Westerners and Asian perceive the world around them is actually different. The results of experiments conducted using Japanese and American students watching fish in an aquarium tank showed the Japanese attended to the context (vegetation, etc) and perceived feelings and motivations of the fish, compared with the Americans who focused on what they saw as the subject matter, the pattern and movement of the fish, to the exclusion of other aspects of the scene [12]. These findings highlight fundamental cultural differences.

4.1 Example of practice
A cohort of ninety-six first year Design and Architecture students at the University of Tasmania were asked to characterise the cultural characteristics they brought to their educational experience. The international students identified attitudes and behaviours they had become aware of since arriving in Australia. However, Australian students initially did not recognise that they brought any cultural expectations and behaviours and had to be led through exercises to identify and acknowledge them. The exercises began with sharing by lecturers from overseas discussing the differences that had been identified by Australians visiting their home countries, and then turning that around to show how the expectations of international visitors would be challenged by coming to Australia, including themselves. In the next stage the students were organised into groups based on their country of origin. They were asked to identify the ‘most valued’ characteristics of behaviour in their country. This was a particularly interesting exercise. Malaysian students, for example, identified ‘kindness’ as the most highly valued characteristic for their country. Australian students identified ‘mateship’ as the most important characteristic, and were challenged when the implications of this with regards to visitors or overseas partners was highlighted. From this starting point, students were then led through contrasting cultural developments using Australia and China as examples. It was explained to both domestic and international students, how Australia had become established and the resulting cultural values, and then the historical development of China and its resulting attitudes and values. This was then linked to current behaviours and expectations and an exercise on how different students might regard and respond to different learning situations. The contrasting connotations of relevant terms, such as the ‘Copycat Culture’ which has a very different interpretation in Australia, where creativity and originality are valued, to China where heritage and the wisdom of elders is valued, were explored and explained. Social rules were explored through exercises in the same way highlighting, for example, how students brought up solely in Australia valued what they considered to be leadership qualities and independence, whilst the Chinese students considered it impolite to put forward their own ideas in a group situation, preferring to present the work and ideas of their peers. The greater understanding of different cultural conventions helped the student cohort to work together more effectively.

In addition to designing learning experiences that explain contrasting values, behaviours and approaches, the most overt signal that the lecturer can make that they are including the international context is by ensuring that their examples in design, design history, and theory are not disproportionately domestic. The introduction of Asian studies in Art History and Theory at the University of Tasmania in 2009 was considered a success because of its popularity, yet it was aimed solely at international students, with domestic design based Art History and Theory timetabled as an alternative, not a partner to the course. This divided the understanding of the students further, rather than brought them together, because of the targeted content.

4.2 Learning creativity
Developing creative outcomes is an essential attribute of a Product Designer and students’ benefit from an environment that nurtures self-confidence and creative thinking. In terms of design education, one of the main reasons Chinese design educational institutions enter partnerships with Australian institutions is because of the creative learning aspects of the Australian programs. The particular values and heritage that inform Chinese education actively discourages students from questioning
accepted ideas and practice. By contrast creative thinking involves exploring the unorthodox and learning based on risk. Pragmatically, the Chinese recognize the need to incorporate methods of creative thinking into the education of students and, paradoxically, maintain apparent unity with the dominant political system. One way of avoiding conflict is to have an arrangement with a partner institution overseas, where students complete the latter part of their studies. While the value of Western qualifications remains relatively high in Asia - a survey of returning international university graduates found 81% of were employed in their home country [13] - the appearance of league tables in recent years has led to a more discerning approach with regard to which Australian institutions Asians prefer to engage with, as well as which overseas partnerships should be sought by Australian universities.

5 BEYOND GRADUATION

Fundamentally, the way information is assimilated and reformulated by the Chinese is different from the Euro-centric culture that dominates Australian norms. Compared with the analytical, scientific way of thinking valued in the West, with its focused linear approach, the Chinese intellectual tradition, as with other East Asian countries, is holistic and dialectical [12]. Chinese take a very long-term view and for this reason personal relationships are of primary importance. While politics and global and local economies are fluid, strong personal relationships [guanxi] and the idea of mutual obligation maintain stability in Chinese business practices. Authority and power relationships must be taken into account, especially in countries, like China, where the emphasis is on hierarchical relationships. Forms of address need careful attention to titles and honorifics assume great importance. In many Asian countries age, in itself, demands respect [14]. In terms of business interaction between Australian designers and Chinese production houses – and the same is true in an educational setting – an understanding of relation-focused and deal-focused behavior is crucially important. Quickly ‘getting down to business’ in China and Japan without first establishing social relationships through conversation, eating together, etc is considered impolite. Misunderstandings, and lost opportunities, can be avoided through increased appreciation of behavioural expectations [15].

Unspoken assumptions underpin conduct in societies and individual expectations on how situations are dealt with. The pervasive influence of rhetoric is reflected in all aspects of Western society. Rhetoric is essentially oppositional, polarizing debate and creating divisions: ‘you are either with us or against us’. This is contrary to Asian thinking, where the aim is for a ‘middle way’ that arises out of considering the opponents within the context of a dispute with the intent of reducing animosity. Politically, rhetoric is embedded in the governance in the Western based cultures that inform Australian structures, maintaining two or three major opposing factions that govern one at a time. This culture of singularity, of either/or, rather than of plurality, is at odds with many Asian cultures that seek to resolve matters in a manner acceptable to all parties [12]. Culture and history are inseparable ‘History does matter, and so do inherited patterns of thought’ [16]. Leung suggests that more investment in developing the theoretical contributions of Asian social psychologists is necessary for an informed internationalization approach globally [11].

The role of culture in language was the central to the anthropologist Edward Hall’s emphasis on culture as the key to identifying reasons for miscommunication. From an Australian perspective, it is essential to seek local knowledge and advice when developing ties with overseas partners. When Griffith University began teaching the Bachelor of Design in Hong Kong the program was designated ‘off-shore’, a term that in Hong Kong, as a result of inadequate quality control by some overseas educational providers, had negative connotations. The term was replaced with ‘transnational’, which was acceptable and less parochial than ‘off-shore’.

6 CONCLUSION

Recognising the current imperative of addressing internationalisation of the Product Design curriculum in Australia at the start of the Asian Century is the first step to providing a unified learning experience for international and domestic students. Working as a global Product Design discipline is a challenge, but will provide graduates with an understanding that relates to current and future practice rather than one that looks back to past practice. Based on the issues and approaches raised in this paper, ways forward for a re-evaluation of Australian Product design education for the current professional climate could include:

1. Domestic students learning languages for the Australasian region, in particular Mandarin.
2. Local students becoming more informed about production practices overseas.
3. Local students better understanding cultural expectations for overseas production.
4. Drastically internationalising the curriculum to improve domestic and international students’ knowledge and understanding of international design practice.
5. Increasing opportunities to visit countries where production is focussed in the region.
6. A high value being placed on the contacts of international students.
7. Developing cultural understanding for students on Product Design courses from all backgrounds on what they personally bring to any design situation.
8. Better planning and support for the integration of international and domestic students.
9. Directly supporting international students taking the English test at the end of their study so that Australia can retain their skills on graduation.
10. Better support for international students needs to be provided in relation to developing a vocabulary for discipline-specific language.
11. Research and development into student-centred learning, specific to Product Design education, in relation to the specific cultural norms of our region.
12. Professional development for the Design industry and manufacturers in Australia in working with international design graduates.
13. Professional development for the Design industry and manufacturers in Australia in working with overseas production partners using culturally acceptable practices and communication.
14. Greater understanding and research into the impact of overseas production on markets, sustainability, etc., that recognises the realities of the Australian situation in the region.

For the twenty-first century Australian Product Design education needs to be realigned, moving from an Australian centred approach to an Australasian centred approach. Teaching and institutional perspectives need to be broadened, embracing the cultures in which Australia is situated. Only then will Australian students be truly prepared for the international arena they will be graduating into.

REFERENCES