Sep 24th, 9:00 AM

# It's the cultural difference that makes the difference: International collaboration in multidiscipline, transcultural, design pedagogy

Clive Hilton
*Coventry University, UK*

Muxing Gao
*Communication University of Zhejiang, China*

Rong Wei
*Communication University of Zhejiang, China*

## Citation

# It's the Cultural Difference That Makes the Difference

Clive Hilton, Muxing Gao and Rong Wei
https://doi.org/10.21606/drs_lxd2021.10.220

For three years, the Communication University of Zhejiang (CUZ), China, and Coventry University (CU), UK, have been collaborating in an annual project that sees multidisciplinary, transcultural groups of undergraduate and postgraduate design students engaging in projects that help prepare them for future employment as culturally aware global designers. Its focus is on an enhanced understanding of the importance of cultural dimensions, research led collaboration, and the need for empathetic, coordinated communication. In these accelerated, Collaborative Online International Learning (COIL) projects, the students self-direct their actions to rapidly break down initial inhibitions in becoming effective, creative problem solvers who, by the project's end, possess an acute appreciation of the role that cultural perspectives and cultural difference play in the design process. This case study discusses the latest COIL 2021 project – the design of an item of medical equipment. It offers examples of the culturally orientated outcomes and gives insights from participating students. It concludes with explanations of how the COIL pedagogic paradigm is transforming design pedagogy, both at CUZ and CU.

Keywords: design pedagogy; transcultural; COIL; cultural difference; collaboration

## COIL - Case Study Introduction

The COIL project offers students opportunities to collaboratively engage with students from an internationally partnered institution giving them exposure to other cultures and seeing things from alternative perspectives. Lasting two weeks, these online projects are largely student led, requiring the rapid formation of strong relationships with their partnered students. The project starts with an online briefing to clarify the project aims and outcomes. Thereafter, groups independently liaise with each other to research the cultural, user-centred, and technical considerations in the brief. CUZ students design solutions for an identified UK user, and CU students reciprocate. Delivering the project against a tight deadline requires students to quickly become proactive in assuming personal responsibility for decision making processes. They must coordinate collective effort to collate and disseminate information while transcending barriers of language. These are all extremely valuable skills that command an employment premium in the globally connected world of design and international commerce. Their mastery in two weeks represents a significant challenge

### Project Framework

Following the model established in the first such COIL project run in 2018, five groups were formed with a mix of gender, culture, design disciplines and educational level (undergraduate and postgraduate). These were paired arbitrarily across institutions. MS Teams was used for online meetings and WeChat for direct discussion between UK and China based students with its in-app text translation (Chinese ↔ English), file sharing and live video features. Some CU group members also coordinated with each other using WhatsApp. Participating Product Design students included those native to the UK, with others from India, Italy, the Czech Republic, and China. The students from CUZ comprised mainly Product Design students along with some students of Visual Communication, and Environmental Design.

## The Brief

The briefs for these COIL projects are written to generate a response that demonstrates a culturally attuned proposal based on effective research and close collaboration with their group counterparts. The brief was augmented with Chinese text so that Chinese students would not be disadvantaged by any ambiguity in the English. Once the paired groups were introduced to each other it was explained that they were required to design an item of medical equipment for an identified target user and need. The cultural emphasis was made explicit in the brief:

> The product designed by CU students will focus on Chinese healthcare culture, while CUZ students will focus on UK healthcare culture. This requires all students to understand and research each other's cultures…You are encouraged to discuss this with the students you are partnered with. Remember, that you are to design for a culture that is different to your own (COIL CUZ-CU brief, 2021).

The students were encouraged to interpret the notion of 'medical equipment' freely, to explore the theme from a range of perspectives such as traditional medicine, state of the art medical care, home therapies, general health, well-being, and self-diagnostic devices, etc. The design proposals should contribute to the improvement of human health (physical and/or mental) and be sustainable in its use of materials and construction. The design outcome, in the form of a CAD model supported by developmental concept sketch-work and research inputs, was to be a design proposal for a material artefact that addressed an identified need within a cultural context. Groups were asked to deliver their project as a ten-minute, six-slide PowerPoint presentation.

## Ways of Working

In the first week, through WeChat, groups arranged meetings, coordinated research activities and sent each other questions, liaising synchronously and asynchronously. While Chinese learner passivity is a frequently reported trope in the literature (Chan & Rao, 2009; Gao, 2006; Gieve & Clark, 2005; Hofstede et al, 2010), what was very quickly apparent during the live discussions between the CU and CUZ students is that, despite some occasional language difficulties, there was not much evident passivity among the Chinese students. A number of factors might have influenced this during work: an innate familiarity and comfort with working and communicating within the WeChat environment; the autonomy to self-govern their actions away from tutor oversight; as well as a natural curiosity and evident enthusiasm for the project as verbalised by a CUZ student: "Working with people from various cultures always gives me a chance to get first-hand insight into a problem, which proves to be the most valuable way of getting information". In their role as mediators, the Chinese students studying at CU were particularly helpful in clarifying any cultural uncertainties. For example, it was difficult for the UK students to gain a sense of the role of traditional medicine in everyday Chinese culture, especially in the context of its use alongside pharmaceutical medicine as practiced in Western cultures. The CU Chinese mediators were able to clarify some of these difficulties. Without them it is likely that the groups' understanding of the cultural perspectives of the target user would have been lesser. In terms of this being a preparatory exercise for their future roles as professional designers and managers, they also gained experience of being a kind of specialist, transcultural, project coordinator. Their centrality to the success of the initial research phase of the project was recognized by both sets of students: "The [UK] Chinese students answered our questions carefully, and our plan was carried out smoothly" (CUZ Student); and "It was great to have XXX to help us because she could explain things to us more clearly" (CU Student).

## Design Phase

By the end of the research phase, the groups had gained a good contextual understanding of the cultural and user scenarios and were primed to feed their research findings into the design phase. The groups used a variety of methods for collating and sharing information. Some used collaboration applications such as Miro and Padlet, others created a shared online folder, accessible through MS Teams or institutional networks. While COIL projects are run and coordinated online, under normal circumstances, the students would have the opportunity to work together either in studio spaces or other, informal, physical spaces to better facilitate the design phase and the coordinating of concept generation, prototyping, CAD modeling and visual communication design. Because of the Covid lockdown situation in the UK, students were only able to coordinate and communicate online, sharing digital files. In China, the CUZ students were able to work together in their studio to coordinate their activities, while continuing to use WeChat as a means of keeping everyone up to date on progress and stage gate deliverables.
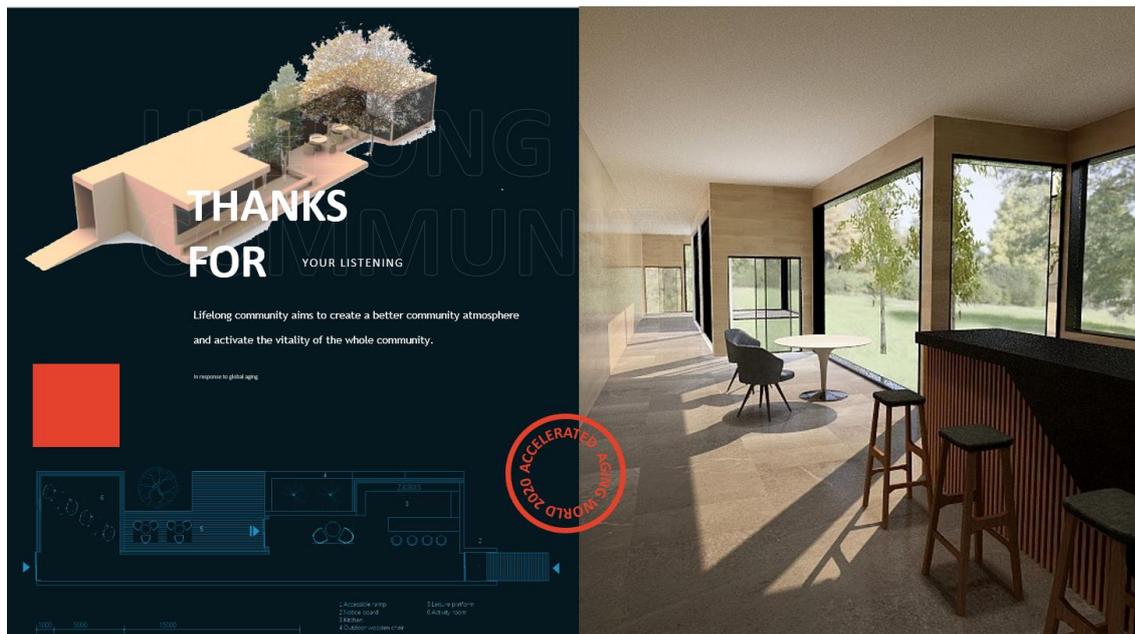
Design Outcome Examples



*Figure 1. An architectural design proposal for a community village for the elderly in the UK, from one of the multidisciplinary CUZ teams (CUZ, 2021)*

Given the two-week project duration, the design proposals were noteworthy for the generally high design standard and the cultural relevance of the concepts. Critically, one project was somewhat underdeveloped compared to the majority, and given the lack of research material in the presentation, it seems that the initial collaboration phase proved problematic for that group. Otherwise, the range of outcomes was impressive. From shower cabinets for the paralyzed to traditional medicine storage container; and from a portable Covid sterilizer kit to an aromatherapy mood enhancer. Of all the projects, two stood out for the sophistication of the thinking, the cross-disciplinary inputs, and the cultural relevance. The first of these, Figure 1, was from a CUZ multidisciplinary team of Visual Communication, Product Design and Environmental Design students. In essence it is an architectural proposal for community-living for the elderly in the UK. Drawing on research into the lifestyle of the British elderly that identified a love of gardening and nature, as well as a fondness for socializing in pubs, the concept is envisaged as a series of structures in which nature and open spaces play a therapeutic part in the daily social life. The product designers contributed furniture concepts, while the visual communication students designed branding and signage. The multidisciplinary aspect of the project really shone through to produce an attractive and credible proposal.

The second project was from a CU team comprising undergraduate and postgraduate Product Design students from the UK, China, India, and the Czech Republic (Figure 2). Their cultural investigations focused on how the poor in Chinese cities and those living in remote, rural locations gain access to healthcare systems and medical provision. Conceived as an internet connected medicine dispensing machine, the system also provides a connection to medical centres, and enables users that lack their own internet access to remotely discuss health matters with medical professionals. Prescribed medicines are collected from the machine in a similar manner in which delivery parcels are sometimes collected from remote, internet connected, secure lockers. The system can also be used to collect samples to be sent to labs. The innovation of adapting a familiar model of package delivery and adapting it to medicinal use demonstrates a capacity to consider the provision of medicine and health care in new terms.
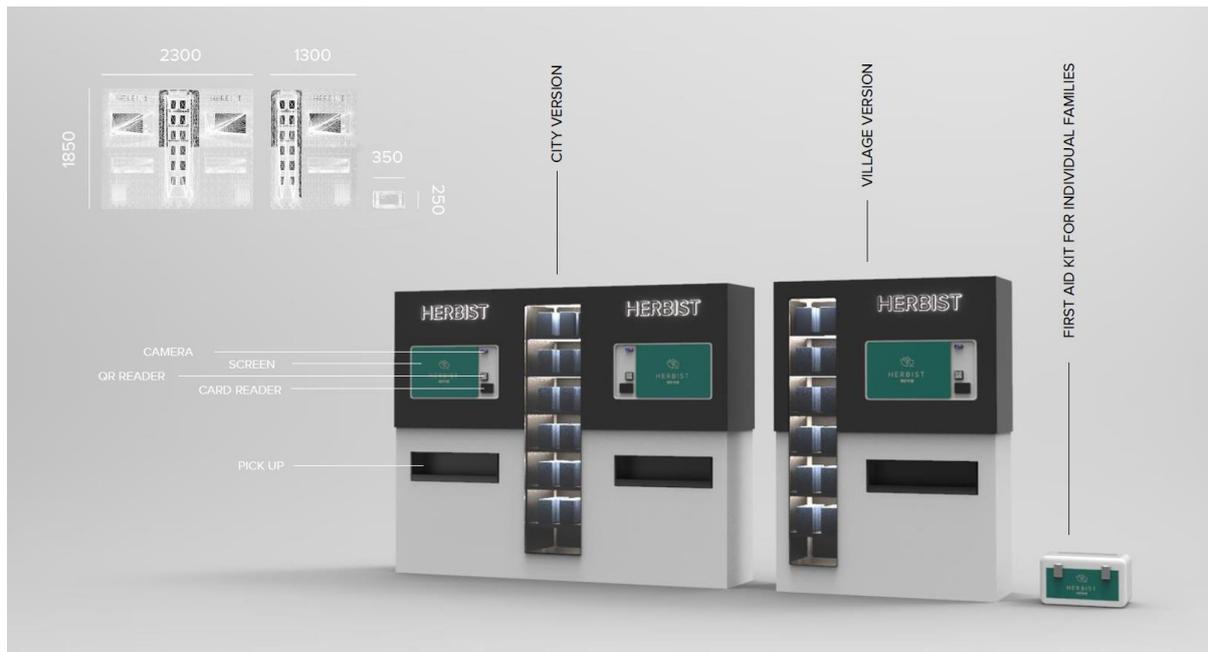
*Figure 2. Concept for internet connect medical access and dispensing system for use in cities and remote regions in China (CU, 2021)*

### Student Response – Participant Feedback

Universally, the response to the project was positive:

> *Thank you for giving us the opportunity to communicate with British students and broaden our horizons. The course uses the form of a group to enhance our ability to communicate and cooperate, and the content of the course is very flexible so that students can do their part. Everything was very good. (CUZ Student)*
> *I learned a lot of new knowledge, such as the relevant living habits and culture in the UK, which broke the previous views on the UK. Through communication with foreign friends, we also improve my English ability. In the exchange with teachers and students, also exercise the ability of communication. (CUZ Student)*

For the CU postgraduate students, for whom this multidisciplinary, transcultural way of working is the norm, they too were clear about the value of working with students from a different institution in a different country:

> *Group work can be difficult, but we worked well together despite our cultural differences (and time zones) and delivered a successful outcome. Working with the Chinese students enabled me to see many perspectives that I had never considered before in previous design projects. This way of working enables me to have more diverse ideas in the thinking and design processes. (CU Student)*

Some saw the success of the project in terms of how it might provide an advantage in the employment market after graduation:

> *Through the project to understand foreign culture, to communicate with school students, and our professional ability has also been improved. (CUZ Student)*
> *Multicultural or multidisciplinary work has always come up during my graduate job interviews I've done so far. And I believe that's always been an advantage for me over other candidates. Working in the industry is about collaborating with different people / dealing with customers from all around the world, this project was a great introduction to the "real" design world. (CU Student)*

While the overwhelming student responses to the project were extremely positive, it would be misleading to suggest that there weren't hurdles or that the communication was always good between the groups:

> *In fact, our early research in the exchange with British students we had some problems, due to software and time difference. British students don't use WeChat, we haven't used Teams for a long*

*time. Happily, in the end the Chinese students studying in the United Kingdom soon answered our questions and our program was able to proceed smoothly (CUZ Student)*

This insight is relevant in a number of ways. It challenges a number of stereotypes about Chinese learners, including the trope that they are generally more passive than Western learners (Gieve & Clarke, 2005; Gao, 2006; Hofstede G.H., et al 2010); Cheng & Guan, 2012) - a position that these authors are sceptical of. Here it was usually the Chinese students who initiated contact and pressed for engagement. The proactive student behaviour also casts doubt on the supposed lower toleration of uncertainty of Chinese students compared to their Western counterparts, and a claimed reluctance to challenge authority (Hofstede et al, 2010). Throughout the project, the CUZ students used their initiative to overcome hurdles, and were proactive in seeking clarifications directly from the Chinese mediators at CU if the UK students failed to respond. All groups seemed to thrive on the opportunity to run their projects under their own initiative, and certainly didn't appear to flounder in the absence of close tutorial guidance or oversight.

## Pedagogic Significance

For the postgraduate students at CU, this cross-disciplinary, transcultural way of working, with the independent freedom to set their own deliverables and methodologies, is very much normal practice and is built into the Product Design Course curriculum. For the UK undergraduate participants, some aspects of the project were novel (working with postgraduate students and the international collaborative context). However, for the CUZ students, most had never worked in this way before at all. Hence, the CUZ feedback, pedagogically, was insightful in that for these students this was a first. The freedom to work independently, the broadening of cultural horizons, the development of English skills, and the reconsideration of cultural stereotypes are cited as learning experience gains:

*In this studio course, I experienced the opportunity to communicate with British students. This experience was extraordinary and I gained a lot of knowledge in various aspects. (CUZ Student) International exchanges and cooperation, education without borders, cultural integration, and on this basis, we designed excellent products to provide benefit society. (CUZ Student)*

Responses like this also counter another trope attributed to Chinese learners – that they prefer to work among like kind, are rote learners and need strong pedagogic guidance (Saravanamuthu & Yap, 2014). Here the CUZ students rapidly and effectively embraced this novel, experiential method of working and learning. A key factor was the degree to which students had independent control of the project, free of direct pedagogic oversight. "Working independently on projects allows me to grow faster, whether it is professional ability or personally" (CUZ Student). The post-project survey in which students were asked what they gained, showed that respondents from both institutions felt that this experience would help them later find employment, "I have not only learned some new perspectives of thinking but also learned some new skills through the interdisciplinary communication in this activity, which I think will enhance my job opportunities" (CU Student). The challenges of a purely online project in which students, from cold, had to work at speed with strangers, seemed to really stimulate the creative, problem-solving processes and collaborative effort. Presumably, the urgency of the deadline overrode any innate participatory reticence. The mutually successful collaborative effort contests the idea that Chinese learners are only collectivists within the same cultural in-groups (Brew et al, 2001; Hofstede et al, 2010; Chen & Bennett, 2012). Possibly, the very novelty and the unknown of the experience is what made the transcultural collaborative aspect of the project so successful.

## Conclusion

Contrary to the stereotype, Chinese students, even those who have no experience with working across disciplines, cultures and nationalities, are shown to participate with just as much commitment and enthusiasm as those from other nations. The student comments support those whose writings also seek to debunk the myth of the universally passive, uncertainty intolerant learner (Gieve & Clarke, 2005; Grimshaw, 2007; Hilton, 2019; McMahon, 2011; Saravanamuthu & Yap, 2014). It is also clear that what they feel they have learned goes well beyond simply designing a physical artefact. Many of the student comments explicitly mention their cultural engagement and offer tangible examples of how the project benefitted them: "The best point is the exchange of Chinese and British culture. In this project, the deepening of cultural exchange not only made me [aware of] British culture but also it spread Chinese native culture" (CUZ Student). A key benefit of the COIL paradigm is its simplicity. With greater autonomy over the mechanisms of communication and collaboration, students are freed from the anxieties of tutor oversight and control. This transforms the activity into

something closer to a sustained social event rather than an onerous, proscriptive, undertaking.

Yet it is not without weaknesses. For design students, the collective, physical making dynamic is a key part of the design process and this is hard to replicate online in anything other than very simple terms, such as making card models with the webcam switched on. Similarly, for more sophisticated prototyping, future ambitions for the COIL paradigm include the facility for students to create shared digital CAD models that can be uploaded to online 3D printing services for production anywhere. At CUZ, the course academics are also exploring ways in which the cross-disciplinary aspect of the model can be further expanded and formally introduced across a number of design courses there. The CUZ team are also proposing inviting other institutions to simultaneously participate, adding a further collaborative dimension into the mix.

## References

Brew, F. P., Hesketh, B., & Taylor, A. (2001). Individualist–collectivist differences in adolescent decision making and decision styles with Chinese and Anglos. *International Journal of Intercultural Relations*, *25*(1), 1–19.

Chan, C. K. K., & Rao, N. (Eds.). (2009). *Revisiting the Chinese learner*. Springer.

Chen, R. T.-H., & Bennett, S. (2012). When Chinese learners meet constructivist pedagogy online. *Higher Education*, *64*(5), 677–691. https://doi.org/10.1007/s10734-012-9520-9

Cheng, H.-Y., & Guan, S.-Y. (2012). The role of learning approaches in explaining the distinct learning behaviors presented by American and Chinese undergraduates in the classroom. *Learning and Individual Differences*, *22*(3), 414–418. https://doi.org/10.1016/j.lindif.2011.12.009

Fang, T. (2003). A Critique of Hofstede's Fifth National Culture Dimension. *International Journal of Cross Cultural Management*, *3*(3), 347–368. https://doi.org/10.1177/1470595803003003006

Fang, T., & Faure, G. O. (2011). Chinese communication characteristics: A Yin Yang perspective. *International Journal of Intercultural Relations*, *35*(3), 320–333. https://doi.org/10.1016/j.ijintrel.2010.06.005

Gao (Andy), X. (2006). Understanding changes in Chinese students' uses of learning strategies in China and Britain: A socio-cultural re-interpretation. *System*, *34*(1), 55–67. https://doi.org/10.1016/j.system.2005.04.003

Gieve, S., & Clark, R. (2005). 'The Chinese approach to learning': Cultural trait or situated response? the case of a self-directed learning programme. *System*, *33*(2), 261–276. https://doi.org/10.1016/j.system.2004.09.015

Grimshaw, T. (2007). Problematizing the construct of 'the Chinese learner': Insights from ethnographic research. *Educational Studies*, *33*(3), 299–311. https://doi.org/10.1080/03055690701425643

Hilton, C. (2019). A Response to the Challenge of Internationalisation of Design Teaching: Hybrid Learning Spaces. In J. Hakkila, M. Pakanen, E. Luiro, E. Mikkonen, S. Miettinen (Eds.), *Cumulus Conference Proceedings Rovaniemi 2019 Around the Campfire - Resilience and Intelligence* (pp. 259–273). University of Lapland, Finland, 27 May-1 June 2019.

Hilton, C. (2019). The Evolution of the Design Studio: Hybrid Learning Spaces. In N.A.G.Z. Börekçi, D. Özgen Koçyıldırım, F. Korkut & D. Jones (Eds.), *Proceedings of DRS Learn X Design Fifth International Conference for Design Education Researchers: Insider Knowledge*. 9-12 July, Middle East Technical University, Ankara, Turkey. https://doi.org/10.21606/learnxdesign.2019.01089

Hofstede, G. H., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind: intercultural cooperation and its importance for survival* (3rd ed). McGraw-Hill.

McMahon, P. (2011). Chinese voices: Chinese learners and their experiences of living and studying in the United Kingdom. *Journal of Higher Education Policy and Management*, *33*(4), 401–414. https://doi.org/10.1080/1360080X.2011.585739

Rao, N., & Chan, C. K. K. (2009). Moving Beyond Paradoxes: Understanding Chinese Learners and Their Teachers. *In Revisiting the Chinese Learner* (pp. 3–32). Springer.

Saravanamuthu, K., & Yap, C. (2014). Pedagogy to empower Chinese Learners to adapt to western learning circumstances: A longitudinal case-study. *Cambridge Journal of Education*, *44*(3), 361–384. https://doi.org/10.1080/0305764X.2014.914154

Yeh, R. (1988). On Hofstede's treatment of Chinese and Japanese values. *Asia Pacific Journal of Management*, 6(1), 149–160. https://doi.org/10.1007/BF01732256

**Clive Hilton**
Coventry University, UK
*ab2359@coventry.ac.uk*
Clive Hilton is the Course Director for the MA Product Design Innovation Course which recruits predominantly international students. This has driven an interest in the design and development of internationalised, multidisciplinary, transcultural curricula aimed at mitigating cultural difference in attainment. The multicultural aspect of the PDI Course is reframed as a positive strength, especially in collaborative projects. Research interests are Sino-Anglo design pedagogy, collaborative learning, and the processes of creativity.

**Muxing Gao**
Communication University of Zhejiang, China
*15281370@qq.com*
Muxing Gao, received the BA from Tianjin Academy of Art, China in 2008, the MA from Universität der Künste Berlin UDK, Germany in 2013, and the PhD from Shanghai University, China in 2019. She is currently working as a Product Design teacher and Chair of the Board of International Co-ordinator Joint Programme of CUZ-SDA (2019-2021) in the School of Design and Art, Communication University of Zhejiang, Hangzhou, China. Her academic interests include international education of art and design, creational design for traditional culture.

**Rong Wei**
Communication University of Zhejiang, China
*1559853371@qq.com*
Rong Wei, a full-time teacher of product design in CUZ (2015-2021) and a teacher in Hangzhou Normal University from May 2021, PhD of Drama, Film and Television Art of Xiamen University. Now he mainly studies the production design of creation culture and the production of science fiction short videos. His research interests include cross-cultural media for image and product design.