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Flipping a Course on Entrepreneurial Leadership in Ethnic Chinese Business: A Mobile Learning Perspective

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ABSTRACT

This exploratory article reflects on the teaching experiences for a course on "Entrepreneurial Leadership in Ethnic Chinese Business" at the Singapore Management University (SMU). It was categorised as a mobile learning course with reference to the flipped classroom model, learner mobility, and user-generated content outside the classroom. We examine three examples of *mobile* learning projects which were assigned to students so that they would be able to internalise key course objectives such as gaining an appreciation of the structure, functions, and cultural uniqueness of traditional small Chinese business organisations in Singapore. The paper also addresses some of the challenges faced by these businesses, in particular the rapidly progressive integration of Asia's market cultures into the global market system and its implications for the owner-managers.

Keywords: Flipped classroom; mobile learning; Chinese businesses in Singapore

INTRODUCTION

Since the mid-1980s, intra-regional trade and investment links in East and Southeast Asia have expanded rapidly with the shift of production by firms from Japan and newly industrialising countries to lower cost neighbouring countries (Menkhoff, Chay, Evers, & Hoon, 2014). The ethnic Chinese from Hong Kong, Taiwan, Singapore, Malaysia, and Indonesia have been actively involved in these massive transformation and integration processes. Against this background, the course "Entrepreneurial Leadership in Ethnic Chinese Business" scrutinises their role as well as some of the (culturally biased) misperceptions about their business leadership conduct. A key issue is the degree to which the success of their extensive business networks can be attributed to ethnic characteristics, or it is simply due to the sound application of good business practice. Based on various corporate case studies and a multidisciplinary explanatory framework, students taking this course would assess the role, characteristics, and challenges of Chinese entrepreneurial leadership and business networks in selected Southeast Asian nations such as Indonesia as well as the People's Republic of China.

The curriculum features eight broad topics: (i) Ethnic Chinese as Minority, (ii) What Makes A Chinese Business Tick?, (iii) "Guanxi" and "Qiaoxiang" Ties, (iv) Chinese Associations, (v) Chinese Leadership, (vi) Innovation in Chinese Businesses, (vii) Worldwide Web of Chinese Businesses, and (viii) The New Chinese Transnational Enterprise. Students have the opportunity to dive more deeply into selected course topics via several site visits, including guided tours to the Chinese Heritage Centre at Nanyang Technological University (NTU), the Federation of Chinese Clan Associations, Qian Hu (a public-listed, innovative Chinese family firm which exports ornamental fish globally) and the Chinatown Heritage Centre.

The course design, mobile learning approach and normal class proceedings have been conceptually informed by the flipped classroom approach (King, 1993; Lage, Platt, & Treglia, 2000; Crouch & Mazur, 2001; Tucker, 2012; McLaughlin, 2014), media richness theory (Daft & Engel, 1986), the theory of student-centred learning (Entwistle & Ramsden, 1983; Ozuah, 2005), learner-centred theory (McCombs, 2005), and personalised learning (Pogorsky, 2015). The flipped classroom model allows students to digest selected course content prior to coming to class (either at home, "on the go", on-site or in a coffeeshop) so that the actual classroom time can be used more effectively to discuss the most relevant points in a more collaborative fashion

(Edudemic, n.d.). A special research guide with various media resources plus timed online quizzes (see Table 1) provide meaningful learning tasks and ensure that students have a good understanding of the respective course matter before the actual session (Brown, 2006; Tucker, 2006; Bennett, Maton, & Kervin, 2007).

Both student-centred learning and learner-centred theory make a valid case for the importance of self-directed learning, where the responsibility for learning is *shared* between instructor and the class. While this is not always easily accomplished in an Asian setting, most if not all institutions of higher learning in Singapore have adopted these principles and are in the process of experimenting with learner-centred pedagogical approaches such as the flipped classroom method (Keengwe, Onchwari, & Oigara, 2014). The presentation of important course content in different formats such as historical videos, PowerPoint slides, historical images, video-taped interviews with expert scholars, guest lectures, site visits, walks and so on enable learners to look at course topics from different angles and ensures a richer communication between instructor and students.

In line with the multiple learning modes of the course, we refer to the term "mobile learning" in a somewhat broader context (beyond the narrow use of using handheld and portable devices such as iPads or smart phones), in order to emphasise the novel teaching and learning opportunities which arise when students proactively learn outside traditional classroom settings (Pachler, Bachmair, Cook, & Kress, 2010; Cook, Mor, & Santos, 2015).

CASE STUDY: FLIPPED CLASSROOM AND MOBILE LEARNING IN A UNIVERSITY COURSE ON ASIAN ENTREPRENEURSHIP

Context

The course involved 45 students of a management-related elective course entitled MGMT304 "Entrepreneurial Leadership in Ethnic Chinese Business". The students represented were from both junior and senior levels, and were allocated into 8 working groups for the course. The course is offered once a year and forms part of the University's major on entrepreneurship. The students represented various Schools in the University, such as Accountancy (9), Business (19), Economics (4), Information Systems (7), Social Sciences (1) and 5 exchange students. The average age amongst the course cohort was 22 years.

Research guide

The university's library provided key resources for MGMT304 in the form of a "Research Guide". It would point students to electronic and print resources relevant to this course, providing hyperlinks to relevant videos interviews with business leaders, and supplementary reading materials which students can access before class.

Flipped classroom technique

In line with the flipped classroom approach (Roehl, Reddy, & Shannon, 2013; Francis, 2016), 9 timed online quizzes (with a focus on key issues highlighted in the textbook chapters) were administered by the University's Learning Management System (LMS) and opened during particular time periods only (specific details were announced in class), mostly before the respective weekly sessions. The timed quizzes started in Week 3 of the course and "expired" the evening before the discussion of the respective weekly topics. Students were informed about the schedule via an email at the end of Week 2 (Table 1), in which they were reminded about their responsibility to ensure that they complete the quizzes on time (i.e. within the timeframe specified). The "timed' approach with an "expiry date" was critical in obtaining students' compliance (who had about 3 days to complete each quiz).

Table 1

Extract of email "MGMT304: Schedule of timed online quizzes"

MCQ TEST#1 TO BE COMPLETED BETWEEN SEPT. 2 8AM – SEPT. 5, 2359HRS
(BEFORE SESSION 4)
Chapter 5* by Hoon Chang Yau (pp. 107-127)

MCQ TEST#3 (TOGETHER WITH #2) TO BE COMPLETED BETWEEN SEPT. 9 8AM – SEPT. 12 2359HRS
(BEFORE SESSION 5)
Chapter 8 by Tsui-Auch and Chow (pp. 193-211)

MCQ TEST#5 TO BE COMPLETED BETWEEN SEPT. 23 8AM – SEPT. 26 2359HRS
(BEFORE SESSION 7)
Chapter 1 by Jessica Chong (pp. 3-21)

MCQ TEST#7 TO BE COMPLETED BETWEEN OCTOBER 14 8AM – OCTOBER17 2359 HRS
(BEFORE SESSION 9)
Article by Wan, F., Williamson, P.J. and Yin, E 2015: Antecedents and Implications of Disruptive Innovation: Evidence from China in Technovation 39-40 (pp. 94-104).

MCQ TEST#9 TO BE COMPLETED BETWEEN OCTOBER 28 8AM – OCTOBER 31 2359HRS
(BEFORE SESSION 12)
Introduction (xxiii-lx)

*"Chapter" refers to chapters in Menkhoff, T., Chay Y.W., Evers, H.-D. and Hoon C.Y. (eds.), *Catalyst for Change - Chinese Business in Asia*, World Scientific Publishing (2014).

Each quiz featured 10 mostly "True/False" questions with a few "fill in the missing word" questions. Students were able to earn credits if they managed to complete the quiz on time, i.e. before class. The total score of all 9 quizzes will make up 20% of their final course grade.

The timed quizzes were summative in nature, and were aimed at ensuring that students would read the respective textbook chapters before class. While there was no systematic evaluation of whether this approach was instrumental for students being sufficiently prepared for the in-class activities, the quality of class discussions observed by the instructors suggests that students gained a better theoretical and practical understanding of the subject matter covered throughout the course via these knowledge tests.

While there were a few cases where students did not complete the quiz on time, the majority found this approach effective. As a result, they did read the textbook and were well prepared for the interactive class sessions.

Team projects

The course included three team projects: (i) a critical review assignment, (ii) the further development of the "Hall of Fame of Chinese Scholars" (a key component of the course wiki), and (iii) a creative mobile learning project to be uploaded on the course wiki. We present these components in the following sections.

(i) Critical review assignment

Groups comprising a maximum of 6 students were tasked to prepare a critical summary review of one reference (as highlighted in the course outline), and each group had to present the essence of the text in class (max: 6 slides, time limit: max. 20 mins). The presentation schedule was prepared by the Teaching Assistant. Altogether there were 8 groups who presented their article reviews, which were in line with the thematic thrusts of the various sessions, as listed below:

   Group 1 (Focus: Ethnic Chinese as Minority or Chineseness) in Session 2
   Group 2 (Focus: What makes Chinese Business Tick?) in Session 5
   Group 3 (Focus: Guanxi and Qiaoxiang Ties) in Session 6
   Group 4 (Focus: Chinese Associations) in Session 7
   Group 5 (Focus: Chinese Leadership) in Session 9
   Group 6 (Focus: Innovation in Chinese Business) in Session 9
   Group 7 (Focus: Worldwide Web of Chinese Business) in Session 10
   Group 8 (Focus: New Chinese Transnational Enterprise) in Session 11

During the presentations, students were required to introduce the author and his/her background, key hypotheses and research methods as well as to critically assess the findings and main conclusions, including the theoretical-conceptual/empirical value of the work. To prepare for these assignments, they were asked to consult the Book Review section of leading journals to appreciate how scholars critique each other's work. Only the oral presentations were graded.

(ii) Further development of course wiki "Hall of Fame of Chinese Scholars"

The main objective of this wiki assignment was to further develop an existing collaborative knowledge website (wiki) on Chinese businesses (https://wiki.smu.edu.sg/MGMT304/Main_Page), accessible only to the students and instructors of MGMT304. The wiki contains collated materials on various scholars such as Mayfair Yang Mei Hui, Wang Gungwu, Tan Chin Tiong, Claire Chiang, Tan Chee-Beng, Gary Hamilton, Michael Backman, and many more. Students' had to continue to expand this "Hall of Fame of Chinese Business Researchers" featured in the wiki by (i) doing research on their scholar of choice, and (ii) to document the findings in the course wiki. Examples of "famous" scholars who have written extensively about ethnic Chinese business and are featured in the wiki include Ang See, Teresita; Chan Kwok Bun; Douw, Leo M.; Gomez, Edmund Terence; Hsin-Huang Michael Hsia; Mackie, Jamie; Nonini, Donald; Ong Aihwa; Tong Chee Kiong; Pan, Lynn; Redding, Gordon, and many more.

Required components for the wiki included: Picture and Short Biography; Elaborations on why the respective scholar(s) started writing about 'Things Chinese' (if this could not be established via the secondary literature, students were requested to find out using other means, for example by emailing the respective scholar for more information or to invite these scholars for a face-to-face interview); Main Publications; Latest Publication and Abstract; Key Collaborators (if any); and Scholarly legacy in terms of main ideas, key concepts, and theoretical Advances.

The wiki contributions were expected to have a word count of between 2000 and 2500 words only. The wiki page was made available through this main link: https://wiki.smu.edu.sg/MGMT304/Main_Page. Students had to log in with their student accounts in order to access the page.

Students worked in groups, in which each group had to focus on one scholar. The final name list of students/selected scholar was posted on SMU's LMS as well as the wiki. A short wiki briefing was conducted in class in Week 2. Students were reminded to ensure that they comply with intellectual property (IP) laws when uploading material (e.g. photos).

No presentation was required. Students were informed that some general recommendations for writing good wiki contributions could be found on Wikipedia (Wikipedia, n.d.).

(iii) Creative mobile learning group project (to be uploaded on course wiki)

During the course, student groups were given the opportunity to conduct social media-enabled learning projects (e.g. with mobile devices as innovative tools) 'on site' in the form of taking photographs with smartphones and uploading these photographs on online sharing platforms such as Flickr, or a newly developed mobile application (app) for an interactive learning trail to provide learners and/or foreign visitors with more in-depth knowledge of a site's past). Examples of potential locations for suitable sites were highlighted in the course outline and included the Chinese Heritage Centre at NTU, Singapore's Chinatown, the Asian Civilisations Museum (e.g. Singapore River Gallery), Sun Yat Sen Villa, Katong Antique House, the Singapore Federation of Chinese Clan Associations, and corporate innovation labs.

The mobile research assignments allowed students to tackle interesting and unique assignments (which they had to propose and fine-tune in close consultation with the instructor) on location rather than in the classroom, at home or elsewhere by using mobile learning devices (Hare & Niileksela, 2011; Voogt, Estrad, Dede, & Mishra, 2013). One past approach was to ask students to listen to a podcast lecture by the instructor either prior to a field trip or on location, for example, in a museum or during a walk. This was followed by a group discussion about the assignment at hand, which students had to complete by preparing/writing/sending commentaries/informative texts/SMS, photos/images/short video clips based on the particular topic onto a 'central repository' such as the instructor's handphone, Flickr, or the course wiki (Gan, Menkhoff, & Smith, 2015).

As indicated by its name (Creative Mobile Learning Group Project), students were expected to be creative and to explore interesting locations for mobile learning group projects on their own. The MGMT course concept provided them with a lot of space for self-directed (mobile) learning. Recent studies by Picciano (2017) or the Education and Training 2020 Working Group on Digital Skills and Competences of the European Commission (2017) suggest that this form of mobile learning will become more dominant in future. In this sense, both instructor and students are pioneers who are pushing the boundaries of innovative learning.

At the beginning, the groups had to develop a one-page draft outline paper (assignment roadmap) of their proposed mobile learning project (the why, what, where, how etc. of your mobile project work) to be submitted as softcopy to the instructor, who then discussed each proposal in greater depth. It was expected that the final version of the paper would draw from class readings, primary (empirical) research on location and other relevant secondary sources (accepted in consultation with the instructor). The use of social media devices (as information gathering or presentation tools) to complete the projects was compulsory.

Projects were planned and implemented as group projects, and group members would receive the same grade/marks. Upon completion of the projects, all students were expected to enhance their learning curve by sharing their findings online via the course wiki.

The final topical list of the eight creative mobile learning projects completed by the class comprised the following titles: "Chinese Religion in Singapore: Haw Par Villa"; "The Business Case of Getai and its Relationship with Religious Institutions"; "21st Century Chinese Weddings"; "Celebrating Mid-Autumn Festival in Chinatown"; "Trishaws in Singapore"; "The Challenges of Traditional Chinese Medicine–Kwong Wai Shiu Hospital"; "Innovation in Singapore Chinese Businesses"; "Chinese Tea Business in Singapore". Three of these projects are described in further detail below.

No formal (graded) presentation was required for this assignment. However, all groups had to informally share their key learning points with the rest of the class at the end of the course via 5-10-minute long 'roundtable inputs' without slides. Grades were allocated according to the quality and creativity of the draft proposal (10%), breadth, depth and innovativeness of the location-centric mobile learning implementation approach (50%), and the quality of the final outcome documented on the wiki (40%). Videos were expected to be professional in terms of how they looked and sounded (length: 10 mins max.). Grades for the video productions were allocated based on the sound/audio and technical (e.g. cutting) quality as well as the quality of the script. Students were reminded that it was essential to have a good storyline which each group needed to develop prior to recordings.

In the following section, we present three examples of these Creative Mobile Learning Group Projects.

Examples of creative mobile learning group projects

Innovation in Singapore Chinese businesses: The case of Cheng Yew Heng Candy

The project group "Cheng Sugar" focused on the topic of innovation in Asian enterprise and explored the importance of traditional values as espoused in the classic Chinese novel Romance of the Three Kingdoms (三国演义) in relation to the way contemporary small family-based businesses operate in Singapore. The mobile dimension included a visit to the company itself (the only sugar-producing factory in Singapore) where they interviewed the company's senior management team, which comprised members of the family that owned the business, such as "John".

Cheng Yew Heng Candy, or Cheng Sugar for short, was founded in 1947 by John's grandfather. When the company was first established, it focused on producing Chinese candies such as hawthorne and sour plum candies that were popular during the late 1940s. However, as taste preferences changed over the years, Cheng Sugar adapted by focusing on the production and distribution of sugar under the trusted STAR brand. Though no longer in the business of candy production, the company still retains the name Cheng Yew Heng Candy as a homage to its heritage and founder.

Cheng Sugar places a lot of emphasis on their traditional company values (incorporated by John's grandfather when he first established the company), which focus on building long-term relationships with its business partners and employees. Over time, even as the business has evolved over the years, these espoused values continue to provide the foundation which drives the way Cheng Sugar operates, as indicated by the company's emphasis on building trust through quality and treating its staff with respect.

Contrary to the assumption that Chinese values would visibly shape and influence the firm's innovation process, the interview data revealed a more complex scenario. The need to innovate has been fuelled largely by the need to stay relevant while ensuring the survival of the company. Through the interview, the project group learned that there is in fact a blend of both Chinese and Western values at work with regard to the management of Cheng Sugar. This suggests that the reliance on Chinese values alone is not sufficient when it comes to understanding the firm's management approach. This is not to discount Chinese values, rather it is meant to emphasise the advantages of incorporating both Western and Chinese values.

At Cheng Sugar, a mix of both sets of values has enabled the company to build upon their traditional company values, which has shaped the way it operates while incorporating best business practices from the Western world to facilitate technology transfer and innovation processes. This integration has proven effective as Cheng Sugar has grown from strength to strength over the years, establishing itself as not only as a sugar production factory but also as an innovative market leader in the sugar industry in Singapore. A recent product innovation is the new line of rock sugar called "Jewels Rock Sugar Sticks".

Through the project, students in this project group realised that product and service innovations are critical in an era of disruption and that Chinese firms need to put more emphasis on making innovation work professionally (Kanter, 2006). The case study was also instrumental in leading the project group to acquire historical knowledge about the importance of tea (and sugar) as a formerly very precious trading good in colonial Asia and the need for local firms to embrace modern branding concepts to ensure that they are not left behind by competitors such as TWG.

Innovation in Singapore Chinese businesses:
The cases of Tai Chong Kok Bakery, Tea Chapter, and The Lantern Shop

The key objective of the project group "Mid-Autumn Festival Trail" was to examine the linkages between the Chinese Mid-Autumn Festival and small businesses in Singapore's Chinatown district. The Mid-Autumn Festival is one of the most traditional Chinese festivals as it signifies reunion and prosperity amongst Chinese families. During this period it is customary to eat mooncakes, drink Chinese tea and play with lanterns while admiring the beauty of the moon with family and friends.

The students selected three small businesses for their project: (i) *Tai Chong Kok Bakery* (set up in 1935, the business is run by the 3rd generation of the Tham family), (ii) *Tea Chapter* (established in 1989, Tea Chapter is one of the very first teahouses set up in Singapore), and (iii) *The Lantern Shop* established more than 10 years ago (it specialises in the resale of Chinese festive lanterns).

Based on interviews with company representatives and the analysis of various secondary materials, they came up with valuable recommendations for improvements, such as reaching out to younger customers via social media such as Instagram and Facebook, the establishment of online ordering platforms and delivery services (e-commerce), the further development of learning trails, more effective partnership management efforts in collaboration with leading hotels to promote their merchandise (e.g. tea) and tapping on the Chinatown Business Association as well as more B2B commercial efforts to reach out to event organisers and shopping mall decorators in order to reduce the companies' dependency on tourists as their main revenue stream.

In terms of mobile learning, the group developed a special "Mid-Autumn Festival Trail" application (MAF Trail app) accessible via the course wiki. It features several video interviews with the shop managers and a mobile application in the form of a "Mid-Autumn Festival Walking Exploratory Trail". The respective MAF Trail app has a clean and simple user interface which enables those who embark on the trail to locate the key businesses using tagged maps, to learn more about the businesses through photos and to test their knowledge in a special quiz section (https://zackaxe.github.io/chinatown-trail/).

A key learning outcome of this mobile learning project was students gaining insight into the fact that 'Chinese culture', broadly speaking, represents a valuable source of resources for exploiting (and creating new) business opportunities and that there is a lot of potential in Chinatown's small business sector to further modernise business management approaches such as e-commerce.

Innovations for Singapore's Haw Par Villa: The digital storybook

One key objective of the project group "Haw Par Villa" was to create more awareness and to educate visitors about Singapore's famous *Haw Par Villa* via a newly created interactive platform named *The Digital Storybook*. Haw Par Villa (built in 1937) is a theme park depicting scenes from Chinese mythology, folklore, legends and history. The theme park, also known as Tiger Balm Gardens, was built by two Chinese-Burmese brothers, Aw Boon Haw and Aw Boon Par, the creators of the Tiger Balm ointment. Over the years, Haw Par Villa has been redeveloped into a sort of Oriental Disneyland theme park, combining western technology with Eastern mythology. Attractions include the Ten Courts of Hell (featuring gruesome depictions of Hell based on Chinese mythology), scenes from popular Chinese tales such as "Journey to the West", "The Legend of the White Snake", as well as the Aw family memorials. Haw Par Villa is one of three large local philanthropic gardens which provide outdoor reprieve for local Singaporeans. It also attracts overseas tourists interested in learning more about Chinese religion, history and mythology. However, after almost 80 years since its establishment, Haw Par Villa is no longer able to attract visitors like it used to.

During their first visit to Haw Par Villa, the project group realised that visitors chose to visit Haw Par Villa over other scenic attractions in Singapore mainly because of its free admission and colourful exhibits. They also observed that many visitors were taking pictures instead of reading the origins of the folklores behind the different exhibits. Therefore, the group decided to create a mobile application prototype aimed at enabling visitors to take photos of themselves in front of the exhibits and to turn that into a value-added, personalised digital storybook.

The final project outcome was an online photo-taking platform which can be incorporated into the official Haw Par Villa website. The platform consists of various photo-taking tasks that visitors will have to participate in while at the same time internalising specifics pertaining to Chinese culture, folktales and mythological stories. After each completed task, visitors are redirected to a page with informative stories about the various exhibits such as the tale "Journey to the West". Eventually, users can create their own digital storybook, showcasing their walk through Haw Par Villa while learning more details about the different sites via the use of the mobile website. The digital storybook can be printed as a physical storybook which can be kept as a souvenir, or users can choose to download it as an e-storybook.

Users also have the opportunity to participate in a scavenger hunt to visit the various exhibits as highlighted in the website, where they are requested to take a picture on site as 'evidence'. To ensure that the storybook is personal, users are encouraged to take a selfie in front of the exhibits and to upload them onto the website so that the platform can automatically generate the digital storybook. To ensure privacy and a smooth traffic flow on the website, visitors need to create an account on the website before they can create a digital storybook. With that, users can only view the images they have uploaded (they can revisit these images anytime).

LEARNING OUTCOMES AND FEEDBACK

In terms of learning outcomes, the course design proved to be effective in getting students to appreciate the structure, functions and cultural uniqueness of local traditional small Chinese business organisations vis-à-vis the challenges they face, especially with the rapidly progressing integration of Asia's market cultures into the global market system and its implications for the owner-managers of these businesses. Students expanded their cultural knowledge about Chinese religious traditions and realised how digitalisation can help these owner-managers to preserve traditional cultural knowledge on the one hand while simultaneously attracting more 'digital natives' to heritage places on the other.

Table 2

Evidence of learning in ethnic Chinese business course

Direct Measures (provide concrete evidence that learning has occurred)	Indirect Measures (point to possible learning outcomes)
• Class participation • Quizzes • Grades for class project presentations, documentations and reports aligned with key learning objectives	• Amount of class time spent in group projects (outside the classroom) • Learning journals • Course evaluations • Course grade distribution

The general post-course feedback was positive. Students stressed that they liked that they were 'forced to read the course supporting book *Catalyst for Change* as it gave interesting insights which they might have otherwise skipped without the mandatory homework'. They found the outings 'very interesting and useful as these visits allowed them to delve deeper into their own identity as Chinese'. Others emphasised that the course had helped them 'to learn more about Chinese culture and to understand how Chinese culture can be applied in the business context'.

In terms of measuring evidence of learning, several direct and indirect measures were used as indicated in Table 2. Direct measures such as quizzes or grades for class projects were aligned with the intended key learning objectives for the course in order to provide concrete evidence that learning has occurred, while indirect measures such as the amount of class time spent on group projects (outside the classroom) or course evaluations point to possible learning outcomes. A customised assessment rubric (ranging from 'Exceeds expectations' to 'Below expectations') aligned with the intended key learning outcomes helped to measure goal attainment and served as a grading decision tool. This rubric was not shared with the students in written form as there were concerns that it might become a sort of creativity blocker in view of widespread 'grade anxiety' amongst students.

Table 3 is an extract of a scoring rubric used to communicate expectations around the quality of the group projects.

Table 3

Assessment Rubric for Group Projects

Evaluation Criteria	Level 1 (below expectations: 1-3)	Level 2 (meet expectations: 4-6)	Level 3 (exceeds expectations: 7-10)	Score
Analytical Thinking and Identification of Biz Challenges Students are able to identify digital transformation challenges faced by the local business organisations studied.	Not able to identify digital transformation challenges faced by the local business organisations studied ...	Transformation challenges faced by local business organisations have been defined.	Transformation challenges faced by local business organisations have been very well defined.	
Ability to Assess Urgency of Change and Propose Improvements Students manage to identify the sweet spot between change and tradition in the business organisations studied, assessing the urgency of change towards more effective processes (e.g. ecommerce, moving beyond current b2b biz ties or customer service excellence) so that the firms studied can keep up with and take advantage of the digital economy.	Unable to assess the urgency of change towards more effective processes ...	Team has come up with some incremental / mediocre process improvement suggestions for the organisations studied ...	Team has proposed significant process improvement suggestions, enabling the organisation studied to keep up with and take advantage of the digital economy.	
Feasibility and Innovativeness of Proposed Solutions Students suggest feasible and novel solutions to tackle digital transformation challenges.	Students fail to propose feasible and novel solutions to tackle digital transformation challenges ...	...	...	

Total Score: ....

A minority of the students gave feedback that there were 'too many quizzes' and that it would have been much better if the quizzes comprised more questions which asked students to provide critical reflections about the assigned reading materials.

CONCLUSION

In this exploratory reflective paper, we report the experiences of applying the 'flipped' and 'mobile' teaching and learning approaches in a course on 'Entrepreneurial Leadership in Ethnic Chinese Business' taught at an Asian university. The brief descriptions of three selected mobile learning projects conducted by students who took the course, their (graded) summaries of the learning outcomes achieved during final class presentations of their projects, students' documentation of their projects on the course wikis, and general student feedback indicate that a flipped classroom approach in conjunction with interesting on-site (mobile) project assignments and excursions do indeed lay the foundation for a deep(er) learning experience. Table 2 presents the direct and indirect measures used by the instructor to gather evidence to determine whether the intended learning outcomes were achieved.

By spending considerable time together with the instructor in fine-tuning the group project proposals, visiting and walking on the (project) site(s), conducting face-to-face interviews with project stakeholders and so forth, students (i) did bond, (ii) had a good learning experience, (iii) were able to observe their environment more deeply, (iv) gained confidence in their own competencies and (v) managed to contextualise the respective project topics, particularly the way these topics have been embedded in the wider socio-economic and cultural context of Singapore.

The course wiki proved to be a useful tool as it fostered collaboration amongst the project project group members and the entire class while the timed online quizzes motivated students to prepare the reading materials before class so as to free up more time for meaningful learning activities either in the classroom or 'on site' via an interactive sessions with the instructor or other subject matter experts such as entrepreneurs or the owner-managers. Anecdotal evidence in the form of conversations with students during the field trips and post-course conversations with students who took the course suggests that such an approach had helped them to gain a greater appreciation of their own cultural heritage. Additionally, besides helping to foster a deeper sense of belonging, the approach has opened their eyes to the richness of 'Chinese culture' as a source of (newly found) identity and pragmatic business opportunities.

From a business management point of view, the key takeaways include the following insights, (i) that product and service innovations are indispensable in an era of 'disruption' and that the owner-managers of small Chinese firms need to put more emphasis on making innovation work professionally as well as help them to gain or maintain brand leadership, (ii) 'Chinese culture'– broadly speaking–represents a valuable resource which such businesses can

capitalise on in order to create creating new business opportunities, and (iii) that digitalisation as a mega trend needs to be embraced proactively and that it can be used by stakeholders to preserve traditional cultural knowledge and practices.

While our overall teaching and learning experiences have been positive, it should be highlighted that continuous skills upgrading with regard to technology-enhanced learning and a robust learning management system are indispensable to ensure that (more or less tech-savvy) instructors who belong to the baby boomer generation are able to "walk the flipped classroom talk" when it comes to engaging our younger generation of "digital natives".

ABOUT THE AUTHOR

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