

Immersion as an educational tool for international understanding in business studies – the case of a "Doing Business in China" class

Munich Business School Working Paper

2014-03

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Munich Business School Working Paper Series, ISSN 2367-3869



Abstract

The globalization of the economy has created an urgent need for business schools to better prepare graduates with the knowledge, skills and perspectives they need in their working lives for a broad understanding of international business practices. In order to fulfill this demand, researchers have been focusing - among others - on how a curriculum could be structured and by whom students should be instructed. Instead, how the programs should be taught has attracted less attention. This paper introduces an innovative concept of immersive teaching methods by building an immersive learning framework. The immersive learning framework includes four immersive learning processes which are separated based on the closeness and degree of similarity to the environment that students are immersed into during the learning process and the real business environment. These processes are book learning, linguistic learning, contiguous learning and practical learning. These learning processes are suggested to be introduced step by step in order to reach the best learning outcomes because each process helps students to form different skills and types of knowledge, i.e. explicit or some type of tacit knowledge. By reviewing popular education practices, we find out that contiguous teaching has been neglected which results in the students' lack of know-how knowledge at a workplace which leads to a comparatively low performance due to an unfavorable environment shock. Consequently, we explain more in detail the concept of contiguous immersive teaching especially as home-based contiguous teaching lacks in current practices and we propose a broad selection of elements that put the teaching method into practice. By having applied some of the proposed elements in a real "Doing Business in China" course, we are able to empirically prove the contiguous teaching's contribution to 1) the advanced understanding of given topics in class such as the understanding towards foreign business practices, 2) tacit knowledge building and here especially the formation of cognitive tacit knowledge as well as 3) the students' high emotional and mental involvement in the class when immersive elements are introduced. Moreover, different elements inside the contiguous teaching show up different level of contribution to the three areas above. This provides implications for education practitioners to select different elements with various functions in order to reach the targeted goal of learning.

Keyword: Immersive Teaching, Business Education, Tacit Knowledge, Teaching Techniques



Introduction

The globalization of the economy has created an urgent need for business schools to better prepare graduates with the knowledge, skills and perspectives for international understanding (Tarrant, 2001). The reason is that the rapid and dynamic global business environment requires culturally attuned and emotionally sensitive global leaders who can understand management issues from a global perspective and professionals who can deal with clients from a variety of different backgrounds. In order to fulfill this need, much attention has been focused on how business education could be optimized to meet the future demands for a competitive labor-force. For example, questions have centered on how a curriculum could be structured and what the contents should be, by whom students should be instructed and also how practical educational programs should be oriented. However, how programs should be taught has attracted less attention (Fink, 2003). This paper tries to fill this gap by introducing a useful educational tool for classes in an international context – contiguous immersive teaching.

At first, existing literature is reviewed in order to emphasize the importance of this research. Followed by the literature review, the framework including the role of explicit and tacit knowledge for skills acquisition is defined. The advanced learning process is analyzed in detail in order to introduce the concept of contiguous immersive teaching and its essential function on students' international understanding and tacit knowledge building. Later on, by proposing elements inside contiguous immersive teaching and applying those elements into a real business school course, we are able to empirically verify the function of this educational tool. In the end, empirical results are shown and a conclusion is made.

Literature Review

As the international business environment is continuously changing, the education of international business students has been transforming, too. According to Dunning (1989), the trend of international business (IB) education in the United States have changed from focusing on the superior U.S. technology and marketing expertise and transferring this expertise abroad to paying attention to the culture and customer differences between countries; later discussions about e.g. foreign exchange rates were integrated due to the wide currency value fluctuations as well as free trade agreements (Martin et al., 2011). Despite the evolvement of IB education along with the changing global business environment, it oftentimes still receives critical reviews. For example, the current business education is criticized for too much focusing on quantitative analytical techniques. In contrast, the development of leadership and interpersonal skills and the ability of dealing with intercultural conflicts are often neglected (Mintzberg and Gosling, 2002; Zettinig and Vincze, 2008). Moreover, Yu et al. (2005) and Milhauser and Rahschulte (2010) argue that there is a gap between the ability of business graduates and the skills that global businesses need. After researching in detail, Mihauser and Rahschulte



(2010) find out that the international manager's deficient competence when being confronted with cultural differences or difficult ethnical issues is of particular interest.

As we can conclude from the above paragraph, IB education requires a new mindset to operate in order to train students' cognitive and communicative competences for success in a complex and diverse community of cultures and countries (Martinez et al., 2007). Prestwich and Ho-Kim (2009) give several suggestions based on the fact of students' lack of real-world experience. They suggest that classrooms could include IB lecturers with IB consulting experience and guest lecturers who are international practitioners. In addition, they also propose a market segmentation approach for IB programs which means that an IB program could develop geographical or regional perspectives that are tailored to the needs and interests of the students. Dlabay (2003) emphasizes that language studies are great methods for students' understanding of the business environment and ethics of one society. Study abroad is also seen as a crucial approach that contributes to comprehensive international understanding. During studying and living in a country, students are able to comprehend the political and cultural issues (Praetzel, 1999). In addition to the above elements, international internships, work-study programs and building cross-cultural team projects are also proposed in literature (Dlabay, 2003; Vance, 2005; Flammia et al., 2010). By reviewing past literature, one can find out that the suggestions have been focusing on the structural changes within business curriculum. The approaches of how international students should be taught are unaddressed. The following text introduces the immersive teaching method as a useful teaching approach and illustrates how it leads to students' understanding towards specific IB issues.

Framework Building

Tacit Knowledge and Explicit Knowledge

As a pioneer in the field of *tacit knowledge* Polanyi (1966) lays a theoretical foundation and often quotes the fact that "we can know more than we can tell". He argues that there exist two aspects of knowing in any instance of a person's knowledge: knowing what and knowing how. People can clearly articulate what they know but hardly express how they know. For example, when someone sees a person that he has seen before, he can easily tell that this face is familiar. However, in most cases he fails to explain how he knows that this is a familiar one (Taylor, 2007). Another example is riding a bike: only by reading about how to ride a bike you will not be able to ride a bike – you have to learn it by riding it and experience the feelings of balance, speed and others on a bike. Following Polanyi's introducing of the two aspects of knowing, the concept of tacit knowledge (or implicit knowledge) and explicit knowledge has been developed by various theorists.

Wagner (1987) defines tacit knowledge as the practical know-how that is normally not openly articulated and must be acquired without direct instruction while Sternberg et al. (2000) propose the concept of tacit knowledge as practical intelligence or practical experience. It is an "action-oriented"



knowledge, acquired without direct help from others, which allows individuals to achieve goals they personally value" (Sternberg et al., 1995, p. 916). Even though there is general understanding and agreement on the use of the term tacit or implicit knowledge, researchers have used different terms to define different categories of it. Nonaka and Konno (1998) divide tacit knowledge into two dimensions: cognitive tacit knowledge and technical tacit knowledge. *Cognitive tacit knowledge* incorporates implicit mental perceptions such as beliefs and values that are taken for granted. While experts can be asked to explain their cognitive tacit knowledge, their verbal reports may only include what they think that should be done in a given context instead of accurately show how they normally act in the same situation. In contrast, *technical tacit knowledge* is demonstrated when people master a specific body of knowledge and skills; it is more related to our general understanding of tacit knowledge as know-how and informal skills. People who possess technical tacit knowledge are unconsciously aware of what they need to do in order to finish a task. For instance, even though a new manager doesn't know much about the company's culture or employee yet, she can still make use of her tacit knowledge and common sense to successfully deal with difficult employees.

In addition to the categorization from Nonaka and Konno, Collins (2010) classifies tacit knowledge into three different levels: relational (weak) tacit knowledge, somatic (medium) tacit knowledge and collective (strong) tacit knowledge. *Relational tacit knowledge* incorporates tacit knowledge that relates to interpersonal interaction or attention. It can be articulated when efforts are made. *Somatic tacit knowledge* comprises knowledge about how to do physical things and standard somatic activities. This knowledge can be communicated and mimicked. The last category, *collective tacit knowledge*, includes knowledge that is the property of society. This kind of knowledge is established based on social and cultural judgments that depend on a certain environment so that it cannot be generalized in explicit ways.

In contrast to the implicit attribute of tacit knowledge, *explicit knowledge* is the knowledge that a person can easily describe or explain. It normally encompasses "technical or academic data or information that is described in formal language, like manuals, mathematical expressions, copyright and patent" (Smith, 2001, p. 315). The "iceberg" metaphor in figure 1 describes the difference between explicit and tacit knowledge. The explicit knowledge of one person is like the visible portion of an iceberg while the tacit knowledge is underwater and invisible. Explicit knowledge is technical knowledge and requires a certain education level in order to understand it. It is codified and conveyed through dialog, demonstration or media such as books, drawings and documents. Thus it can be learned through formal educations with a structured framework and conscious learning strategies. In contrast, learning implicit knowledge occurs unconsciously. The deeply personal experience, perceptions and sights can actually not be expressed; it resides inside individuals. Thus no conscious strategies are applied. Despite the obvious difference, Reber (1993) suggests that interactive and cooperative learning processes are needed. Especially for a complex learning situation, both implicit



and explicit learning processes contribute to a person's learning performance (Anderson, 1982; Nonaka, 1994).

Anderson (1982) supports the statement by building a three stage framework in order to acquire skills. In the first stage, learners acquire knowledge of what they should do (explicit knowledge). It includes some facts and procedures that are required to apply the skills. The next stage involves the learning of how they can apply the skills by actually practicing them. Finally the last stage of acquiring a skill occurs when the skills can be handled more and more automatically without awareness.

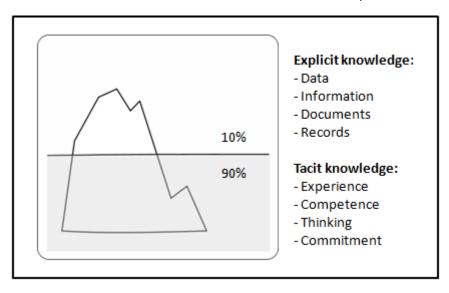


Figure 1: The "Iceberg" metaphor describes the difference between explicit & tacit knowledge

Building the Path to Expertise through Immersive Teaching and Learning

Borbye et al. (2009, p.8) defines immersive learning as "the learning that occurs as a result of immersion in a particular environment. Therefore, it is characterized as an environment-related and environment-preparative method that employs aspects of multiple learning methods in addition to its unique environmentally dependent features". Ribeiro (2013) discusses five types of immersion for learning in industry plants: non-immersion, self-study, linguistic socialization, physical contiguity and physical immersion. From his point of view, the "level of immersion" of these five types increases in ascending order. In the end, learners' tacit knowledge and expertise are improved along with the different involvement activities at each immersion level. The first level in his framework is non-immersion; it is the stage where people understand self-explanatory things. The next level is self-study. Self-study such as reading books helps a person enter a new technical area without interacting with corresponding experts (Ribeiro, 2007). The third level – linguistic socialization – is the stage where learners immerse in a relevant linguistic environment so that experts from the site are able to explain technical behaviors in the given environment (Collins and Evans, 2007). The fourth level is physical contiguity. It is the stage where learners are put in a given working environment and have the opportunity to actively emotionally involve into the work environment. However, learners' be-



haviors or acts cause no outcome to the environment. The last stage *physical immersion* stands for the direct "hands-on" experience. It is the utmost immersion stage for learners to become a practitioner (Collins and Evans, 2007).

With the rising of the immersive level above, different types of tacit knowledge are built. For example, learners start to build their collective tacit knowledge from socializing with industrial experts in the linguistic socialization stage. By being actively emotionally involved in immersive physical contiguity environments, learners form sensorial awareness which contributes to further understanding. Finally in the physical immersion stage, learners generate somatic tacit knowledge by being physically involved in the industrial work.

The framework described above for training workers to become experts in industrial plants can be used as a reference for the foundation of a framework for IB education. This new framework helps to understand how immersive teaching methods work for training the students' IB expertise (Table 1). The levels of immersive teaching are separated based on the closeness and similarity degree between the environment that students were immersed into and the real business environment. In the end, there are basically two main categories: created environment learning and real environment learning. Real environment learning includes only practical immersive learning which means that students learn in a real business environment. That happens when students are involved in an internship or a real job. It provides for the highest degree of immersion. Created environment learning means students are immersed into an environment that is created by different educational tools in order to learn business practices. The latter can be further divided into three levels: book learning, linguistic learning and contiguous learning. Reading books has the lowest immersion level. Students study by themselves without interacting with relevant experts or the real world. Linguistic learning which has the comparatively higher immersion level than learning from books allows students to acquire knowledge by immersing into the created environment that relevant experts/lecturers create through a structured framework. Inside the environment, learners could talk and exchange ideas with other students and experts. Finally, contiguous learning has the highest immersion level among the three created environment learning levels. It helps learners to be immersed into an environment that has high proximity when compared to real practices. Within the environment they are immersed into, learners are able to involve themselves actively and have some "hands-on" experience.

Different levels of immersive teaching train students' different types of ability and knowledge. Book learning opens students to explicit knowledge. Students are able to obtain some terminology and scattered information about different theories. However, students have the difficulty to judge the relevance or irrelevance within a specific area. They may get a lot of information, but it is hard for them to connect that information with a real world situation. Linguistic learning through lecturers' explanation enhances students' acquisition of explicit knowledge because experienced lecturers teach knowledge in a more logical way; they explain the intention behind the conceptual knowledge and at the same time combine it with their practical experience and give real-life cases to illustrate a



problem. Students start to form cognitive knowledge from this stage by socialization inside the class-room either with classmates who will be in the same work area with them or experts who are already successful actors in the specific business area (most business schools employ lecturers with extensive practical experience).

Book learning	Linguistic learning	Contiguous learning	Practical learning
Immerse into virtual environment build by book	Immerse into virtual environment created by lecturers' explanation	Immerse into nearly real environment created by different immersive teaching elements	Immersive into real business practice
Explicit knowledge			
	Cognitive tacit	knowledge	
		Sensorial awareness	
		Technical	tacit knowledge

Table 1: Framework for expertise training in international management

The third immersive level – contiguous learning – is essentially different from the physical contiguity level in the framework built by Ribeiro (2013). Instead of letting learners only watch the real industrial handwork as on the physical contiguity level with the consequence that their acts won't have effect on the environment, contiguous learning in our framework emphasizes the effort of trainers to build and create an environment that is as similar as possible to the real practice; more importantly, learners are able to join the created world and act and create outcomes in it. At this stage, students have high immersive experience and are actively involved in the learning process both mentally and emotionally as well as physically. Thus, this stage has many advantages. First, it enables students to build sensorial awareness. The sources of the sensorial awareness (such as touch, smell, taste, hearing, sight etc.) that are provided by contiguous teaching help students to seize an overall feeling and understanding for a given set of practices. Second, it forms students' technical tacit knowledge related to a certain business situation by setting up an immersive learning environment which is similar to. In the end, students will be able to adjust to this environment and adapt behaviors and attitudes compliant to the particular environment. Some of the adaptations and learnings happen intuitively. In an immersive environment there is a constant, authentic feedback to the student's actions. This means that if something goes wrong because of reasons based on the relationship of the student



with her environment she will immediately experience the result and be able to try to quickly adapt her actions without causing a (large) damage (which is one of the nicer differences between studies and working life). Third, it enhances students' cognitive tacit knowledge to a large extent since students are part-responsible for the outcome within the immersive environment so that the method "forces" them to reflect on the result and be active in the learning process (Mughan and Kyvik, 2010). Considering it has been proved that tacit knowledge is an influencer towards future success, students with higher tacit knowledge are valued and targeted by managers as qualified employees (Wagner and Sternberg, 1987; Berman et al., 2002).

Fourth and finally the immersive learning stage of *practical learning* refers to a situation where students practice a skill for an extended period of time. In this stage, students are directly engaged and exposed to the real business world. They act inside the realistic business situations and get real social feedback and reactions to their actions. Compared to the contiguous learning stage, students' technical tacit knowledge is largely increased in certain business environments.

These four stages as described above provide the reference for a complete training system. Each immersive stage fosters and enhances students' different skills and abilities. By looking at educational practices of IB education through this framework, one can easily recognize that it is the contiguous teaching level that most of the times lacks in current practices. Traditional teaching normally means a lecturer teaches students about a subject by asking students to self-read the suggested literatures, linguistically lecturing in combination with presenting slide decks, and occasionally asking for some group work. Some business schools also require a mandatory internship as part of their curriculum from students. The intention is to guide students close to real practices and help them to adjust themselves to the real world before they are given important assignments in a full time job. However, the problem for students to jump from traditional classroom learning directly to an internship or full-time job where further practical learning is taking place is twofold. First, being part of the business world may cause a shock for students and graduates because of the distance between the environment that is created mainly by linguistic teaching and the real business context. Second, students might lack technical tacit knowledge for the real business context. That is, even though they learned explicit knowledge from school and understand the business situation, they don't know how to deal with it. This problem matches the current requirement of practical skills and real world relevance from business school graduates (Prestwich and Ho-Kim, 2009). In the end, students' performance can be influenced by the unfamiliarity of the environment and the lack of tacit knowledge; they even can lose valuable opportunities such as being directly recruited as full-time employees after an internship. Eventually, contiguous teaching as a transition phase in between becomes essential.

Application of contiguous immersive teaching in IB education

Due to the important transition function of contiguous immersive teaching, some business schools incorporated a semester abroad in their curriculum in order to provide students with immersion experience so that students can get in touch with the real, international and intercultural business



world. One of the more well-known of these kinds of programs is the FIELD Global Immersion Program at Harvard Business School. Students are provided with the opportunity of staying abroad for a limited time to practically apply what they have learned in lectures at home. Moreover, the El Salvador Business Immersion Program with Santa Clara University tries to enable students to connect their business education with an immersive experience by travelling to El Salvador.

However, *immersion abroad* is just one part of contiguous teaching. For an *immersion at home* experience the challenge is the creation of an environment at the home institution that is as similar as possible to the foreign environment that students have learned about. The reason is that not every school has sufficient resources to provide (every) students to go abroad and not every student has the time or financial resources to do so. For these situations and circumstances we try to develop a general immersion at home teaching method which can be used more practically and widely.

Based on the demand of training students' international understanding, we suggest some home immersive elements for a regional business studies course. In the example of a class in "Doing business in China" there are many immersive methods that can bring students closer to the business environment and culture in China already at their home universities (shown in Table 2). The class could for example focus on the Chinese language (which is essential to understand e.g. branding issues - nearly all Western brands have a Chinese brand name that often times has a special, positive meaning), the Chinese Internet by asking the students to surf the Chinese Web (with the help of translation apps) or Chinese management styles by going through a computer based business simulations (where even the names of the Chinese managers are a challenge at the very beginning). Students could also be immersed into a Chinese environment by being co-lectured with a Chinese lecturer through online video communication tools. If there is a corresponding class in China, a joint class with Chinese students is also an option. As an additional element, the class could be taught at the local Chinese garden while having some green tea. Instead of asking guest lecturers to teach a lecture in the classroom students could visit a Chinese company in the city. And since dinners and banquets are essential for successfully doing business in China, seating order rules, toasting etiquettes, "exotic" food etc. could be learned about at a local Chinese restaurant where mostly Chinese go to.



- Watch documentaries
- Work on case studies
- Guest lectures by experienced managers
- Joint lectures with a class in China
- Workshop on intercultural etiquette
- Write Chinese characters
- Go out for a "business dinner" at a "real" local Chinese restaurant
- Group work with a mixed Chinese / local team
- Work remotely on business projects in China
- Role plays
- Listen to Chinese pop music

- Computer management simulation
- Learn about micro expressions
- Cook Chinese dishes
- Bring Chinese brands into the classroom
- Try Chinese snacks in the classroom

Table 2: Selected examples of immersion at home elements for a "Doing Business in China" class (in no particular order)

As we can see, compared to the traditional teaching, contiguous immersive teaching tries to achieve more: students are enabled to be immersed into a highly simulated real world setting which students have learned about but haven't experienced (we exclude "worlds" that are purely computer generated virtual realities). By bridging the knowledge obtained with the created environment in a real world setting, where body and heart are involved in addition to the mind, the likelihood of lasting and advanced learning outcomes is to be increased (Kim and Lyons, 2003; Coleman, 2006). For example, if sensorial awareness towards tastes, light, hearing etc. is formed the effective understanding of a given practice can clearly be supported. Moreover, students' tacit knowledge will be largely increased due to his action and continuous feedback inside the special targeted setting. Because the students are responsible for the outcome, they are highly involved either mentally, emotionally or physically (for more details see the last section).

From the above analysis, the following hypotheses are proposed:

H1: contiguous immersive teaching contributes more to students' advanced understanding of given practices than traditional teaching

H2: contiguous immersive teaching contributes more to students' tacit knowledge building than traditional teaching

H3: contiguous immersive teaching contributes more to students' high involvement than traditional teaching

Methodology

By taking advantage of immersion at home principles where not too much has to be changed in an existing concept of a lecture, we had applied some of the proposed immersive elements in the class "Doing Business in China" at Munich Business School from January to May 2014. The applied elements were a computer based business simulation, watching Chinese documentaries and photos,



bringing in some original Chinese business presents, listening to popular Chinese music, writing Chinese characters, practicing Taiji, reading Chinese newspaper, eating Chinese snacks, working on case studies, burning of incense etc. In order to test the three proposed hypotheses above, a questionnaire consisting of four sections was designed: the first section was designed to test an immersive element's contribution to students' understanding of the topics of doing business in China. To be more specific, the understanding part was further divided into emotional understanding, mental understanding and physical understanding. The second section was to assess an immersive element's contribution to the creation of tacit knowledge. The question was specified as "compared to a pure frontal teaching experience, do you feel better prepared for a business contact with Chinese in China or at home by having experienced this immersive element?" From this question, we can check the practical use of the immersive element for a potential future situation accordingly. That is, it teaches students not only explicit knowledge which focuses on what to do, but also more know-how knowledge. The third section was to test an immersive element's contribution to the degree of involvement of students by asking the student to rate the overall intensity of the experience of the corresponding element. A higher degree of intensity means students feel immersed to a higher degree into the environment that the element creates. Moreover, an extra section was set up in order to check the extra value of the immersive element for the topic that had taught. The answer for each question is based on a seven-point scale. The higher the score the better is the performance of the element. During the semester, anonymous questionnaires were distributed to 15 attendees at the end of the classes where some of the immersive elements had been applied.

After having received all questionnaires, we analyze the data for three aspects. The first aspect is the contiguous immersive teaching method's overall performance; that is, it's overall contribution to each area: advanced understanding, practical use, and intensity of experience and extra value. The overall performance of each function is measured by the average point that all individual immersive elements receive for the function, separately. The second aspect is the overall performance of each immersive element inside home contiguous immersive teaching. The performance for each element is measured by the average score that that element receives from all questions/functions and the standard deviation towards its score. In the end, we could find out not only the average point that each element gets but also how differently that students evaluate it. The last aspect is the different performance of each element on different functions. This analysis gives us a detailed picture for each element's performance on each function. The performance is measured by its average score as well as the standard deviation of the score.

By the end of the semester, we were able to find some interesting results.



Result of the Survey

Overall Performance of Home contiguous immersive teaching

As we can see from the Figure 2 below, among all the functions, "the importance for emotional understanding" receives the highest average point: 5.80 out of 7.00 full point. That means the students expect the contiguous teaching elements that were applied in class to help them understand the Chinese business culture in a more emotional way. That is to say, students with the immersive experience expect to have less unfavorable emotional feelings such as nervousness or culture shock when they are put in a real Chinese business environment in the future. "Degree of practical use" follows behind with very close average point 5.79. It indicates that contiguous immersive teaching is of high practical use. It provides students with tacit knowledge that makes students feel better prepared for business contacts with Chinese when compared to a pure frontal teaching method. The overall intensity of the experience comes next with the average score of 5.73. That means students feel highly involved in the environment that contiguous immersive teaching creates. When we combine the high intensity of experience degree with the important contribution of contiguous teaching to emotional understanding, we can summarize that students feel involved in a more emotional way. However, contiguous immersive teaching contributes less to physical understanding (5.04) compared to mental and emotional understanding. That is because contiguous teaching enhances students' cognitive tacit knowledge in the late stage (compared to linguistic teaching) while only form technical tacit knowledge in the initial stage (compared to practical teaching). From the score of rating for extra value, we can find that there are still more functions of contiguous teaching other than the three functions that we have proposed. This shapes light for further relevant studies.



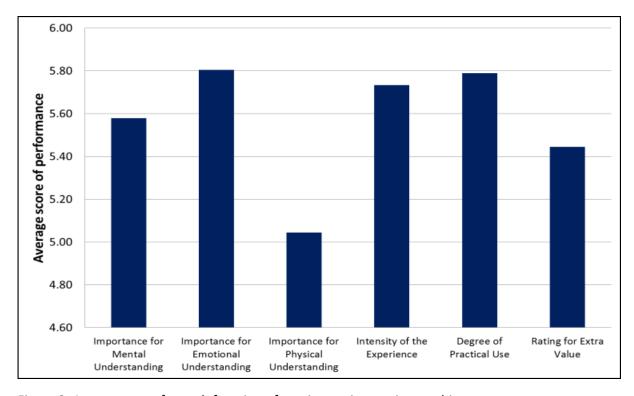


Figure 2: Average score for each function of contiguous immersive teaching

Overall Performance of Each Immersive Element

By comparing the overall performance of each element, we divide the 11 immersive elements into four groups (see Figure 3). The first group presents a high average performance with low standard deviation. That means this group of elements is favored by students with high consistency. Working on case studies, examining Chinese business presents, watching Chinese documentaries and eating Chinese snacks all belong to this category. Eating Chinese snacks turns out to perform the best among others with the average score: 6.35; in fact it contributes most to "the importance of physical understanding" (6.64), "the importance of emotional understanding" (6.45) and "degree of practical use" (6.64) as well as "the intensity of experience" (6.36) (see Figure 4). That means students' tacit knowledge including both cognitive and technical know-how is largely improved by this immersive element. To be more specific, students feel that they are better prepared for meeting Chinese business contacts by having experienced at least some originally very unfamiliar type of food such as seaweed. They have also experienced that Chinese tea leaves go up after pouring hot water and sink to bottom few minutes later (in the West tea is usually served in tea bags or in a sieve - the Chinese way of serving tea is to most Westerners at first confusing and might distract them from a conversation). Because of the high emotional and physical involvement of these experiences, this contiguous teaching element seems to give students a strong experience.



The second group that includes e.g. the Linghe computer based simulation of managing a Chinese company shows a high average performance but a high standard deviation. The Linghe simulation comes next after eating snack in terms of the overall performance with the average score of 6.19. In this simulation, students take a role in a Chinese company and tasks are assigned that have to be accomplished by communicating and coordinating with the Chinese co-workers and colleagues. In the end, students found that the Linghe simulation has a high "degree of practical use" (6.50) and that it helps them to understand the Chinese business culture mentally (6.42) and emotionally (6.42). That is, students' cognitive tacit knowledge is largely enlarged. The result indicates that students feel better prepared for doing business in China after experiencing this immersive method than by a pure front teaching method. Moreover, it assists students in understanding the logics and principles behind when dealing with Chinese businessmen and makes them more confident in a Chinese business context in real life. However, the fact of a high standard deviation of performance indicates that students value this element differently: most students think it is very useful as stated above while few students doubt its function. The reason lies probably in the implicit function of the Linghe simulation. It doesn't show Chinese special characteristics as obviously as eating snacks, where you can directly feel the new taste or watching a Chinese documentary that directly shows body language and mimics. In the Linghe simulation students must think deeper inside and connect their operational result with Chinese attributes. Some students however fail to do so.

The third group consists of elements with a satisfactory performance. The elements are listening to music, reading Chinese newspaper, practicing Taiji, watching Chinese photos and writing Chinese characters. In Figure 3 these are the elements with middle average points and high standard deviation. Practicing Taiji for instance contributes to a comparatively high "physical understanding" (5.67) of Chinese culture. Moreover, with the involvement of the whole body, practicing Taiji gives students an intensive experience. However, concerning its abstract attributes, students have divergent views of this immersive element.

The last group includes elements with comparatively low performance and low standard deviation at the same time. Incense burning is the only element belonging to this group. The result shows that students agree consistently that burning incense inside a classroom has less contribution to their overall understanding of Chinese business culture and is of less practical use.

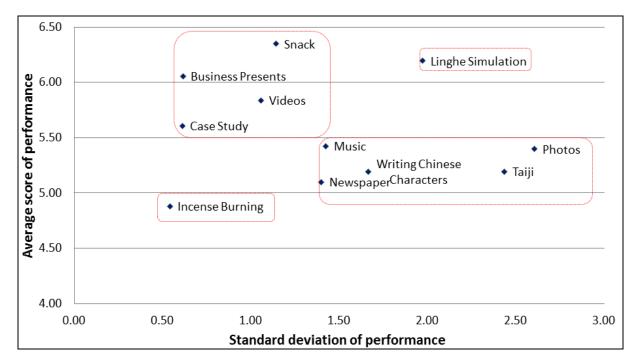


Figure 3: Overall performance of contiguous immersive elements

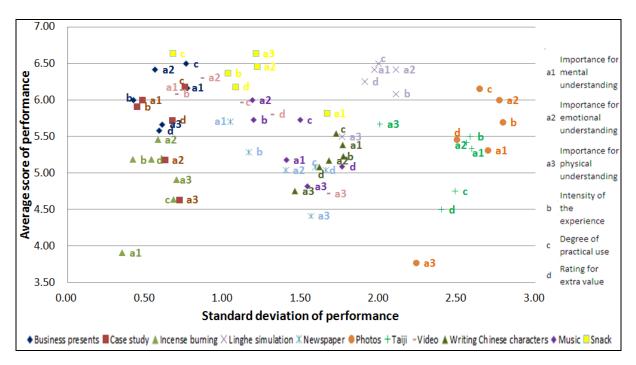


Figure 4: Various performance of each contiguous immersive element's function



Conclusion

Globalization has highlighted the need for business students to graduate with a clear international understanding. This paper has identified a useful but neglected educational tool that could facilitate students' awareness and understanding of foreign business practices: contiguous immersive teaching. After having explained the combined effect of explicit and tacit knowledge learning for people's skill building, we introduced a learning framework for expertise training. The learning framework includes book learning, linguistic learning, contiguous learning and practical learning process. Each process helps students to form different skills and types of knowledge. And more importantly, those processes to expertise building should be done in a transitional way so that students can adjust themselves easily from one process to another. By reviewing popular educational practices, we find out contiguous teaching has been neglected. This results in the students' lack of know-how knowledge at a workplace and consequently leads to a relatively low performance due to the unfavorable environment shock. Consequently, we explained more in detail the concept of contiguous immersive teaching especially in the form of home contiguous immersive teaching and proposed a selection of elements that can be applied in this teaching method. Finally after a survey that was conducted in a real class practice by using some of the proposed elements we were able to test the function of contiguous immersive teaching and generate the following conclusions:

By verifying the contribution of overall contiguous immersive teaching, we were able to discover some interesting results: first, it contributes to students' advanced understanding of given topics in class, especially to the emotional understanding. In contrast, students' physical understanding is not visibly improved due to the fact that contiguous teaching is a stage that comes before practical teaching and thus contributes only to the initial stage of technical tacit knowledge building, where people can master specific hands-on knowledge. Second, students' tacit knowledge is largely increased through contiguous immersive teaching, especially the cognitive tacit knowledge. Students feel better prepared to face real business practices in the future after having experienced it than after having gone through only traditional teaching. Third, students are highly involved in the topic taught during the contiguous immersive teaching especially in an emotional and mental way. In the end, the learning outcomes are largely improved through their active engagement.

When considering the performance of different immersive elements inside contiguous immersive teaching, we find out different elements inside the contiguous teaching show up different level of contribution to the three areas above. So lecturers should combine and select different elements with various functions in order to reach the targeted goal of learning. Moreover, some immersive elements have abstract attributes so that students hold various opinions about their performance. In the end, it is important for lecturers to explain well the purpose of some elements in order to reach optimal results.

In a nutshell we were able to introduce an important educational tool for the current requirement of graduates in a global business environment in this article. For future study, we call for more attention



to the application of the immersive teaching method to other education fields. We also suggest preparing a second round of questionnaires for students who enjoyed the class and went abroad to China afterwards. It would be interesting to see how they assess the immersion at home teaching methods after they experienced the "real" China during their studies or business. Moreover, more and other practices to enrich immersive elements and verify their functions are also promising research areas.



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Appendix

Example of a page of the questionnaire:

China immersion at home experience questionnaire

Apart from frontal lecturing with the support of slides you experienced some immersive elements in today's class. The goal of immersion is to narrow the "knowing-doing dap". Please rate the following experiences based on the questions below. Thanks you!

1st immersive element: Chinese characters

a) Please rate the importance of this immersive element for the different means of understanding:

	Very						Very
	low						high
	1	2	3	4	5	6	7
Importance for mental							
understanding							
Importance for emotional							
understanding							
Importance for physical							
understanding							

b) Please rate the overall intensity of the experience of this immersive element

Very low						Very high
1	2	3	4	5	6	7

c) Compared to a pure frontal teaching experience, do you feel better prepared for a business contact with Chinese in China or at home by having experienced this immersive element?

Not at						Very
all						much so
1	2	3	4	5	6	7

d) Generally speaking, do you see any **extra** value in this immersive element for the topic you have learned about in class today?

Not at all						Very much so
1	2	3	4	5	6	7