

# Adapting an American-based Simulation to a Hong Kong Classroom

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*Case studies tend to embed the language and values of the culture in which they are created. To use an American-based behavioural simulation, Looking Glass Inc., in Hong Kong, we needed to adapt it to the students' language environment and proficiency, their culturally derived behaviours, and their understanding of the context of American business. In Hong Kong, the norms prescribing language use are complex and contradictory; English is a major business, government, and legal language, but Cantonese and sometimes Mandarin have a continuing presence, especially in oral communication. The English in the simulation, however, reflecting the authors' emphasis on realism, included slang and idiomatic expressions that were confusing even to students otherwise fluent in the language, and thus we had to modify materials to aid comprehension. We also had to adjust our administration of the materials to account for cultural differences between the individualistic and low power distance dimensions of the American scene represented in the simulation and the collectivistic and high power distance environment our students found more comfortable. Our strategy in adapting the simulation was to stimulate participants in Looking Glass Inc. to act authentically in their roles, negate reactive and promote proactive behaviour at all four organisational levels, and encourage the thoughtful and complete analysis of the simulation, not something that came naturally. Finally, we had to make explicit several elements of American business assumed by the authors but not known to the students, including American geography and transportation systems, laws and administrative bodies, and race and gender issues.*

Keywords: Case studies, simulations, intercultural communication, American business systems

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**S**IMULATIONS ARE USED extensively by American business schools and corporations to teach management, business communication, and organisational behaviour (see, for example, Crookall, 1995; Hugenberg, 1992; Hugenberg, Owens, & Robinson, 1988; Jameson, 1993; Jean-Claude, 1987; Kable, 1989; Keys, 1986, 1989; Keys & Wolfe, 1990; Lamourex, 1995; Larreche, 1987; Lloyd, 1978; Smith, 1992; Thatcher, 1990; Thatcher & Robinson, 1985; Wolfe, 1978, 1983, 1985). Their use in higher education outside the US, especially in Asia, has been limited (Chang, 1997; Chang, Ma, & Lee, 1998; Kao, Tsai, & Yao, 1997). This picture is changing, however. Usage has increased substantially over the past ten years with the expectation of accelerated growth in the new millennium (Chang, Ma, & Lee, 1998; Faria, 1989, 1998; Porter & McKibbin, 1988; Wolfe, 1993).

*Looking Glass Inc.* is a complex large-scale American-based behavioural simulation that provides participants with realistic exposure to interpersonal and organisational communication. Over a two year period we implemented a project (the Action Learning Project funded by the Hong Kong SAR Government) to introduce and adapt *Looking Glass Inc.* to improve the teaching of an organisational and management communication course at a Hong Kong tertiary institution. Realising that *Looking Glass Inc.* was meant for use with American students and that Hong Kong students have different needs and backgrounds, we instituted adaptations to better fit this American-based simulation to the educational environment in Hong Kong. The process involved developing supplemental materials and new policies and procedures to facilitate the administration of the simulation while using the intact simulation materials. In this article, we describe the simulation, review the rationale for our adaptations to the Hong Kong classroom, and discuss our process.

### **The Simulation and the Setting**

*Looking Glass Inc.* (university edition) is a management and behavioural simulation produced by the Center for Creative Leadership,

Greensboro, N.C. (Lombardo, McCall, & DeVries, 1990; McCall & Lombardo, 1982). The simulation is designed to model reality by having participants act as managers in a hypothetical glass manufacturing company. The roles include president, three vice-presidents, nine directors and seven plant managers in three divisions: Advanced Product Division, Glass Division, and Industry Glass Division. *Looking Glass Inc.* features realistic management problems and jobs, management activity patterns, and external environments. The simulation allows participants to experience a day in the life of twenty top-level managers in which they are faced with the challenges of communicating effectively, delegating authority and motivating subordinates, thinking and acting strategically, and making both simple and complex decisions.

The three divisions in *Looking Glass Inc.* face distinctive external environments, ranging from reasonably stable and predictable to unstable and highly volatile. One hundred issues (problems and opportunities) are built into the simulation. The issues faced by simulation participants relate to finance, personnel, legal matters, production, marketing, research and development, and safety. Examples include:

- An opportunity to acquire a new plant
- A decision about what to do with a plant that has lost money for the last few years
- Pollution and discrimination problems
- Raw material shortages
- Production capacity limits
- Competition with foreign manufacturers
- The need to fill a vacant plant manager position

### **Student Participants**

Involved in this two-year administration of *Looking Glass Inc.* were two hundred simulation participants from two undergraduate degree programs in a Hong Kong tertiary institution. The participants represented the final year students from the BA (Hons) English for Professional Communication (BAEPC) and Bachelor of Science in Finance (BSCEF). Each year, 60 BAEPC Year-2 stu-

dents were assigned as observers and recorded conversations (using video and audio recorders) during the simulation. These observers also reminded, if necessary, the designated English-only speakers not to use Cantonese. The observers, however, were prohibited from interfering with the simulation.

In the second year, five business associates were invited to participate in the second simulation run in order to foster an authentic business-working environment. These business professionals took up the upper-level management positions in their respective organisations. They were a senior product manager of Talbot International Retailing Ltd., the Assistant Human Resources Manager of the Hospital Authority, and managers of medium-sized enterprises.

### **Administration**

We concurrently administered six and five parallel *Looking Glass Inc.* simulations each year. Each of the simulations was independent; participants interacted only within their own companies and not with participants in the parallel companies. We used this implementation strategy for two reasons: (a) gaining economies of scale by teaching larger number of students during a concentrated time period and (b) allowing students in parallel situations to compare their learning experiences in the debriefing exercises.

To allow for experience in taking part in different organisational levels, the simulation was run twice with one week in between. Students were assigned to different divisions and different organisational levels in the two simulation runs. In doing so, students were able to familiarise themselves with the simulation and became more involved in the second simulation. The simulation materials are rich and varied enough so that the students did not experience overlappings in the two assigned roles.

We used a student group consisting of nine individuals as a management committee to assist in the mechanics of administering the simulation. This student group prepared props (e.g., name tags and office signs) and coordinated logistics (e.g. room assignments and arrangements) before the simulation. The management committee also provided services (e.g., information handouts from

the Controller's Offices and mail delivery service) during the simulation and prepared for and managed the simulation debriefing sessions (e.g., discussion leaders and facilitators) after the simulation.

To increase the realism of the simulation, the students were assigned different roles in each simulation run. For the first run, participants applied for the positions of president, vice president, or management committee. Shortlisted candidates were invited for interviews. Only those candidates getting the highest interviewed marks were chosen to be the presidents or vice-presidents. We assigned the roles of directors and plant managers based on the Myers and Briggs' Personality Indicator to mix personality types throughout the three divisions. For the second simulation, the selection of the top management posts was based on student nominations and assigned by us from the list of suggestions. Participants were placed in different divisions and organisational levels in the first and second runs. For example, individuals taking up the top management positions in the first simulation were assigned as directors or plant managers for the second simulation, or vice versa.

To create a semi-authentic Hong Kong workplace communication environment, we implemented a decision rule stating that students had to communicate only in English. In the first simulation run, half of the simulation participants were assigned as English-only speakers with the remainder allowed to use their native language, Cantonese. In the second run the language roles were reversed. This practice also allowed participants to compare their experience of communicating both in their native language, Cantonese, and in their second language, English.

### **Rationale for the Adaptations**

We needed to modify the simulation to better fit the background, experience, and skills of the Hong Kong students. This section briefly reviews the rationale for our adaptations.

#### **Language Adaptations**

One of our major objectives in using the simulation was to create an environment where students would have to utilise and develop

their interactive English-language communication competency and learn to use English side-by-side with Cantonese. The prescribed language use simulated the Hong Kong workplace communication environment.

In Hong Kong, English is one of the major business, government, and legal languages in an oral trilingual working environment. Hong Kong bilingual Chinese engage primarily in Cantonese language conversations, as their colleagues (about 95 percent) are Cantonese-speaking Chinese. However, they also have to communicate in English with local non-Chinese-speaking expatriates, with business travelers visiting Hong Kong, and with overseas customers or suppliers via telephone. Added to these interactions are occasional conversations in Mandarin with Chinese individuals from China or Taiwan. These communication dynamics result in a multilingual environment in which Cantonese bilinguals switch between two languages (Cantonese and English) and possibly a third language (Mandarin) daily. Cantonese is the dominant oral language, but English and, occasionally, Mandarin (as a third language) also have a continuing presence in a firm's oral communication system.

In Hong Kong, the norms prescribing language use are complex and contradictory. There are two general language environments. At higher levels in professional and business fields, English is the preferred medium of exchange. Even Cantonese professionals regularly use English in work-related conversations and even more so in written communication (Du-Babcock, 1998, 1999). There are no sanctions put on these professionals if they choose to communicate in English.

In other segments of Hong Kong society, sanctions are placed on Cantonese bilinguals who choose English as their medium of communication. Peer pressure in Hong Kong discourages the development of interactive communication competence. Consequently, Hong Kong bilinguals have difficulties in developing interactive communication skills. At Hong Kong universities, bilingual students by and large choose to use Cantonese in discussing case study assignments. Our use of the English-only speak-

ers legitimized the use of English and countered the peer pressure. The operating principle is similar to rate buster sanctioning in the Hawthorne experiments (see Roethlisberger & Dickson, 1939/1967) because individuals wanting to practice English are pressured by peers not to show off their English proficiency. Once students graduate and take positions dealing with international business, these sanctions gradually are relaxed. As individuals progress to higher levels of responsibility, they tend to engage in more international communication encounters that require English.

Even conscientious Chinese individuals have difficulty maintaining a balanced proficiency between first- and second-language communication skills (Pennington, Balla, Detaramani, Poon, & Tam, 1992). Because the societal pressure in the dominant Cantonese language environment restricts the use of English-language communication, Hong Kong bilingual Chinese live in an environment that is not conducive to using and improving second-language (English) competency. Accordingly, many Cantonese speakers do not feel confident enough to use English when Cantonese is an option. The Hong Kong language and cultural context has a direct impact on both the confidence and competency of Hong Kong bilinguals as they engage in English-language conversations.

The English-language competency level of simulation participants is a crucial factor affecting their effectiveness. In environments such as Hong Kong where English is a second language or "auxiliary language" (Luke & Richards, 1982), the use of American-based simulations may require modifications that take into consideration the English-language proficiency levels of non-native English speakers. Consequently, Hong Kong participants who read in their second language (English in this case) may take longer to read and comprehend the simulation materials than do American participants. In addition, the reading and writing competencies of Hong Kong students vary widely. In an interactive behavioural simulation, the less fluent participants slow the communication process by delaying their responses, providing incomplete and inaccurate information, and misinterpreting messages.

In American-based simulation materials, slang and idiomatic

expressions are often included to add realism and show how American managers actually communicate in day-to-day business operations. In the *Looking Glass Inc.* simulation, the in-basket materials are derived directly from the written and oral communication of practicing managers. American-based simulations often assume that simulation participants are native Americans or that the participants are familiar with the American business environment and practices. While increasing the usability and the acceptance of the simulation by American participants, the inclusion of slang and idiomatic expressions presents problems for Hong Kong non-native English-speaking participants. Consequently, modifications are essential because many Hong Kong students lack fluency in using English and even the high English-proficiency second-language speakers may find it difficult to understand slang and idiomatic expressions.

### **Cultural Adaptations**

Cultural differences between American and Hong Kong simulation participants also necessitate adaptations. American-based simulations and accompanying instructional materials often reflect American managerial styles and cultural orientations. In particular, the instructional materials for the *Looking Glass* simulation set forth industry and administrative guidelines, company information, managerial roles, and time schedules that are developed through observing and interviewing American managers and student participants.

But the Hong Kong setting is different. One approach to identifying these differences is to look at Hofstede's (1991) cultural dimensions. According to Hofstede, America is a highly individualistic and low power distance culture while Hong Kong is a collectivistic and high power distance culture. If high power distance is activated and becomes dominant over collectivism, upper-level managers may develop a centralised and authoritative organisation and not delegate authority, share information, or involve lower-level subordinates in organisational decision making. If collectivism in the form of involving all participants in the decision-making process is activated and serves to neutralise high-power



distance, the participants engage in information-sharing behaviour in the process of developing group consensus. This latter behavioural style corresponds to Theory J organisations as described by Ouchi (1981). We followed a strategy to activate collectivism in the form of inducing all participants toward active participation and to de-emphasise and neutralise high-power distance where only the top-level managers are actively engaged.

Hsu (1981) distinguishes between the personality-centred orientation of Americans and the situational orientation of the Chinese. The reactive behavioural style of the Chinese can be contrasted with the more proactive style of the personality-centred Americans. For Chinese, establishing the authenticity of situations is vital so that they can adopt appropriate behavioural guides for those situations. Chinese, in practicing situational behavioural styles, are likely to wait until their roles are clarified before acting. But the pragmatic Chinese can be encouraged to initiate behaviour if they see that a learning experience is useful and can be applied (Biggs & Watkins, 1996). Consequently, we adopted an implementation strategy aimed at activating the situational orientation of Chinese.

In addition, communication patterns reflect one's view of hierarchy. Americans and Hong Kong Chinese perceive hierarchy differently; Americans prefer egalitarian relationships, distrust hierarchy, and act independently. Hong Kong Chinese, on the other hand, respect hierarchy, are conditioned by Confucian ethics, and therefore act within the parameters established by hierarchy (Redding, 1990; Westwood, 1992). Confucian behavioural codes set down five cardinal relationships (Hsu, 1981). Two of these—ruler to ruled and friend to friend—have implications for the probable behaviour of Asian participants in complex behavioural simulations. Reciprocal responsibilities must be activated by both parties to develop mutual satisfaction and high productivity. The ruler-ruled and the friend-friend relationships define appropriate role behaviour of Asian simulation participants as they engage in vertical and horizontal organisational communication. In vertical communication among participants at different organisational levels

(equivalent to ruler-ruled relationships), authentic role behaviour by superiors is necessary to activate desirable and productive behaviour of subordinates. Subordinates in turn must reciprocate the authentic style of the superiors in the process of properly defining their roles. In contrast, in horizontal communication events (equivalent to friend-friend relationships) simulation participants in differing departments and divisions must exchange and not withhold information in order to ensure that the organisation (*Looking Glass Inc.*) operates effectively and efficiently.

"Face" behaviour, although a universal phenomenon, is manifested differently in Asian and Western societies. In individualistic Western societies "face" relates to the protection of "self" (Goffman, 1995) and the observance of politeness rules and strategies (Brown & Levinson, 1987). In Asia, "face" is a group phenomenon, in that individuals must take into account their relative places in the collective society. Care must be taken in order to promote and protect the face of others in the collective (Bond & Hwang, 1986). The disclosure of mistakes and the analysis of reasons for mistakes are more difficult where "face" behaviour is a group phenomenon.

These cultural orientations of Hong Kong participants have direct impact on the American-based simulations that are used in Asia. Because of different cultural orientations Hong Kong participants may carry out their assigned roles differently from their American counterparts. In addition, they are less willing to fully disclose their simulation experience in debriefing sessions. Our strategy in adapting the simulation was to stimulate all members of *Looking Glass Inc.* to act authentically in their roles, negate reactive and promote proactive behaviour at all four organisational levels, and encourage the thoughtful and complete analysis of the simulation experience.

### **Context Adaptations**

Last, we had to adapt the simulations because students did not understand fully the context of American business, which differs vastly from that of the Hong Kong participants. American simula-

tions do not as a rule contain explanations of contextual factors and assume that the American participants are familiar with the background factors described in the simulations (as does *Looking Glass Inc.*). Sharing the same culture with simulation participants, the American simulation-material developers make implicit cultural assumptions and do not perceive the necessity of including explanations of contextual variables in the simulation materials. To illustrate, we include the following three examples from the *Looking Glass Inc.* simulation. In the first example, knowledge of the locations of the two plants and the transportation systems connecting them (between Advanced Production Division and Industrial Glass Division) is essential for making effective organizational decisions. Simulation participants had to plan and negotiate the physical movement of raw materials between these two plants and to market destinations. In approaching these decisions Hong Kong students have to struggle in order to understand the names of the cities, the distance between the cities, and the transportation alternatives.

A second set of decisions stems from differing familiarity with background knowledge of the legal framework, specific laws, and judicial and administrative bodies in the United States, especially how these laws and regulations are enforced. Hong Kong students do not have a frame of reference to understand the difference between administrative bodies and their enforcement of regulations and the judicial actions taken in American courts. In *Looking Glass Inc.* important issues required decision making that was related to administrative regulation (e.g., federal and state agencies) and to judicial litigation (e.g., antitrust law). Because their life experience has not familiarised them with these background contextual variables, Hong Kong simulation participants are probably being exposed to new and unfamiliar information.

A third set of decisions requires understanding of the intricacies of racial relations in the United States and the administrative regulations so as to ensure equal opportunity and equality among differing ethnic groups and minorities. In particular, the importance of understanding Equal Employment Opportunity Commission

(EEOC) guidelines was essential. The United States is a multi-ethnic society and issues of race are complex. Americans have differing orientations and attitudes towards racial issues but mutually understand the importance and complexity of the underlying issues. Living in the United States provides them cultural understanding and context that Hong Kong simulation participants do not normally share. Consequently, Hong Kong students, because of the contextual differences, do not perceive the necessity of resolving racial issues and ignore racial problems in behavioural simulations.

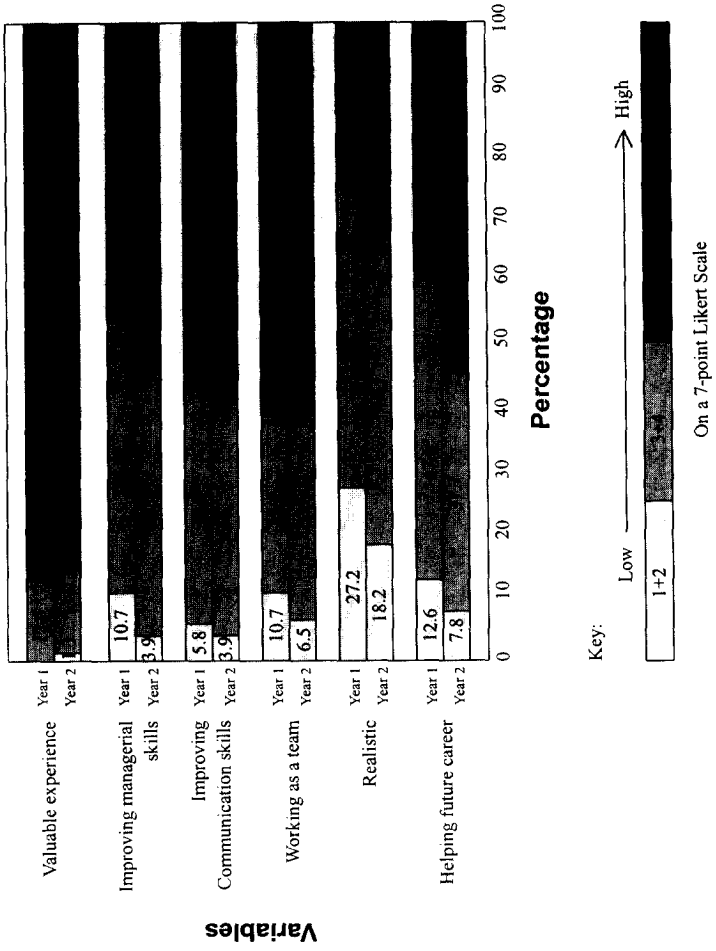
## Evaluation

We measured the effectiveness of the simulation by circulating a questionnaire, interviewing students, and gathering the observations of external consultants. We also assessed the problem recognition skills of the students. In this section, we discuss the assessments of the simulation.

From the questionnaires we learned student attitudes toward the simulation. Figure 1 shows attitudes on six statements measured by a seven-point Likert-scale (1 is lowest and 7 highest). Reactions to the simulation after the first and the second years of administration allow comparisons. In sum, students reacted favorably to *Looking Glass Inc.* in both years. Overall improvements were recorded in the second year, with substantially higher percentage ranking at the highest level (points 6 and 7).

We also conducted a two-hour focus group discussion with ten selected participants, including business associates and external consultants. The exchange focused on three major topics: (1) power, status, and communication; (2) leadership and decision-making; and (3) the use of first and second languages and the comparative impact on oral communication effectiveness. One student participant captured the essence of the simulation experience: "I find simulation activities very different from tutorial role-plays. The created atmosphere and relationships were stressful and created a sense of reality. Activities such as solving personnel problems, the competition in the market, and the problems arising in the manufacturing plant were very realistic."

Figure 1: A Comparison of Participant Attitudes towards Simulation Effectiveness



Two external consultants who could give an impartial and professional perspective observed the simulation and evaluated its effectiveness. Both consultants, impressed by students' general interpersonal communication skills and business knowledge, concluded that the *Looking Glass Inc.* simulation mentally tuned students to the challenges of the business world and helped them develop skills to effectively cope with interpersonal relationships and manage crises efficiently. These acquired skills, they felt, would shorten the new recruit adjustment period when eventually employed. In sum, the evaluation of the consultants was that the simulation participants were exposed to realistic business situations and had developed skills that may be considered to be keys to success in their future careers.

The evaluation of *Looking Glass* also focused on whether the simulation affected the problem recognition skills of the students. Problem identification is a vital skill of managers, as effective managers recognise and define opportunities and problems and do not just make decisions in predetermined decision areas. This problem recognition skill of simulation participants improved as they participated in the *Looking Glass Inc.* simulation. In the following we make comparisons in student behaviours in the first and second runs. Sixty-six percent of the students solved more problems in the second simulation run. Relating to this group, the number of identified problems increased by 25 percent in the second run. In addition, those students who did not identify additional problems in the second run worked on more sophisticated problems that required collaboration among departments. Issues of EEOC, anti-trust law, the role of women, and unionization require country-specific contextual knowledge of the United States. Seventy percent of the students solved at least one of the four identified country-specific issues. Those who did not work toward the resolution of these problems in the simulation recorded these issues in their lists of crucial unresolved problems. Students recognised the importance of these issues and tried to act upon them. The experience gained by the students in the first run enabled them to pinpoint and distinguish among problems in the second run.

In sum, multiple evaluations provide consistent and reinforcing evidence of the successful use of a complex behavioural simulation in Hong Kong. The larger movement in the second run of both years and in the second year coincided with the introduction of alterations to the simulations. The alterations were initiated from the beginning but were expanded in the second year.

### **Adaptations In Conducting the Simulation**

Table 1 provides an overview of the adaptations we made at each stage.

#### **Pre-Simulation Stage**

The pre-simulation activities established the basis for the successful administration of the *Looking Glass Inc.* in Hong Kong. In the pre-simulation stage we provided background information of the American (business and organisational) environment and the nature of complex behavioural simulations. By doing so we were filling in the missing background context and encouraging the students to initiate and respond to messages in previously unfamiliar and possibly face-threatening situations during the simulation. The rationale was to better define the roles so as to negate the Chinese situational orientation culture of “waiting before acting” (Hsu, 1981) and of risking face-threatening behaviour (Bond & Lee, 1981) by having to admit a lack of knowledge about relevant issues (problems and opportunities). We first extended the time frame to allow longer preparation time and included a mini-lecture that stressed the importance of acting proactively in the assigned roles.

Structuring the communication environment to encourage active involvement by all students was a major consideration in the adaptations. Students avoided communicating and making decisions in unfamiliar areas and students assigned plant managers roles either acted passively or rejected the perceived authority of superiors. Realising this situation after the first administration of *Looking Glass Inc.*, we instituted changes to counter the apparently activated high power-distance behaviour of both plant man-

**Table 1**  
**Adaptations to Simulation for Hong Kong Environment**

Simulation Stage	Variable Areas	Reasons for Adaptation	Descriptions of Adaptation
Pre-simulation	Background Knowledge	<ul style="list-style-type: none"> <li>• Unfamiliarity with context (i.e., terminology, culture, business practices, government regulations, geography)</li> <li>• Development of English language communication competency</li> </ul>	<ul style="list-style-type: none"> <li>• Lengthen preparation time</li> <li>• Encourage proactive behavior</li> <li>• Familiarize participants with US business environment</li> <li>• Provide glossary</li> </ul>
Simulation run	Information Processing	<ul style="list-style-type: none"> <li>• Possibility of consensus decision making</li> <li>• Slower comprehension</li> </ul>	<ul style="list-style-type: none"> <li>• Lengthen simulation running time</li> </ul>
	Involvement	<ul style="list-style-type: none"> <li>• Avoidance of unfamiliar areas</li> </ul>	<ul style="list-style-type: none"> <li>• Run simulation twice</li> <li>• Encourage informal communication</li> </ul>
	Realism	<ul style="list-style-type: none"> <li>• Creation of multi-lingual working environment</li> <li>• Non-acceptance of peers as upper level managers</li> <li>• Refusal of lower level managers to make decisions and contribute positively to organisational effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>• Use business associates as Presidents (CEOs or Vice-presidents)</li> <li>• Assign English-only speakers</li> <li>• Enforce English-only regulations and rules</li> </ul>
Post-simulation	Self-reflection and experience sharing	<ul style="list-style-type: none"> <li>• Resistance to disclosure of sensitive information and weaknesses</li> </ul>	<ul style="list-style-type: none"> <li>• Use horizontal and vertical debriefing strategy</li> <li>• Focus on problems rather than personalities</li> </ul>



**Table 1 (continued)**  
**Adaptations to Simulation for Hong Kong Environment**

Simulation Stage	Variable Areas	Reasons for Adaptation	Descriptions of Adaptation
			<ul style="list-style-type: none"> <li>Analyse both resolved and unresolved problems</li> </ul>
	Retention and application	<ul style="list-style-type: none"> <li>Potential non-integration and non-internalisation of experience</li> </ul>	<ul style="list-style-type: none"> <li>Require reflective paper</li> <li>Conduct immediate and delayed debriefings</li> </ul>

agers and their superiors. First, we encouraged horizontal communication of the plant managers among themselves as they had sufficient authority embedded in their roles without referring decisions upward in the hierarchy; second, we encouraged more authentic behaviour on the part of superiors in their vertical communication with plant managers.

We also briefed the participants on the American business environment so that students could better understand the significance of relevant contextual background factors in preparing their roles. The contextual background for *Looking Glass Inc.* can be divided into four broad categories: racism, women's issues, administrative and legal issues, and geography and transportation systems. To illustrate, we singled out geography and the transportation system. Using a series of maps of the United States as props we showed how goods could be transported among the three-division plant locations and to market destinations. In this illustration, we concentrated on the interstate highway system and the railroad systems that interconnected these destinations and relative costs and time of using these transportation systems.

The preparation of individual roles is a vital activity in a simulation that is as complex as *Looking Glass Inc.* When we administered *Looking Glass Inc.* in the United States, we gave the students 45

minutes to prepare their individual roles. In Hong Kong we initially allocated two hours for preparation time, as we wanted to ensure that all participants fully understood their roles. The English-language competencies of the participants varied widely and we decided to err on the high side rather than not give students adequate preparation time. However, we found that this allotment was still not adequate and made a second adjustment to three hours. These adjustments made after the first simulation run originated from approximately ten percent of students requesting an extension of preparation time. These informal requests, observation during simulation runs, and formal analysis of the student papers showing a neglect of important problems provided the basis for establishing a more appropriate length for the preparation period.

The in-basket material preparation period was held one day before the simulation run and was supervised by tutors who also were available to answer students' questions as they arose. We found having the students sequestered together for a specified period of time produced even preparation and seriousness about *Looking Glass Inc.* and its importance. The preparation alterations facilitated the administration of the simulation. The participants saw tangible evidence that their fellow students were also preparing at the same time. This strategy, we believe, increased the confidence of students to interact fully with all others in the simulation runs.

A glossary of terms likely to be unfamiliar to the majority of the students was prepared and distributed. This 11-page glossary was derived from an analysis of the student reports from the first-year administration of *Looking Glass Inc.* It included 170 entries in four different categories: difficult-to-understand concepts; slang and idiomatic expressions; infrequently used vocabulary; and terminology. Table 2 includes selected entries from this glossary. We discussed and illustrated how the participants could refer to this glossary to quickly look up unfamiliar terms and concepts.

In sum, the time frame for the pre-simulation activities was extended and allowed sufficient time to

- Brief participants on the logistics of the simulation, the history of the company, and background contextual information

- Encourage active participation in the simulation
- Include a question and answer period.

The adapted orientation reduced the anxieties of the participants and increased their competence by acquainting them with the differing and unfamiliar context and by giving them a convenient reference guide. The pre-simulation activities provided shared contextual materials so that the participants could concentrate on preparing their roles without worrying about unfamiliar subjects and topics. With these adaptations, we were able to protect the participants from possible loss of face and to direct them toward full engagement in simulation activities.

### **Simulation Run Stage**

During the simulation run we introduced adaptations aimed at allowing the students to process more information and therefore discuss additional issues (problems and opportunities); increase their involvement, especially in regard to encouraging pro-active communication behaviour; and raise the perceived realism of their experiences. As the students were reading the English simulation materials and communicating in English and with designated English-only speakers, the time required to process the information and communicate was longer than in comparable learning situations composed entirely of American first-language speakers. In addition, the time requirement for developing consensus decisions dictated a longer time frame. This longer time frame allowed sufficient time for the collectivistic Chinese to thoroughly sort out and discuss the relevant issues (e.g., problems and opportunities).

Recognising that the conditions of administering the *Looking Glass Inc.* simulation in Hong Kong varied from those in the United States, we initially lengthened the time allocated for the simulation run from 4.5 hours in the US to six hours in Hong Kong during the first year. Following the first simulation run in Hong Kong, we found that this extension still was not adequate and upped the time to seven hours in the second year. The increase of simulation running time allowed the participants to have the necessary time to solve most of the problems embedded

**Table 2**  
**Sample of Glossary Entries**

Type	Vocabulary	Definition
Difficult-to-understand concepts	Affirmative Action	Requirement that an organization takes specific steps to remedy the present effects of past discrimination in hiring, promotion, etc.
	Layoffs	The act of an employer telling people to leave their jobs, usually because there is no more work for them to do.
	Unionize	People join or form a trade union in their place of work.
	Anti-trust law	Laws intended to stop large firms from taking over their competitors, fixing prices with their competitors, or interfering with free competition in any other way.
	Litigation	The process of fighting or defending a case in civil court of law.
Slang or idiomatic expressions	Beef	Complain or grumble/ Muscular strength, e.g. got plenty of
	Feds are breathing down our backs	Federal agencies (the authority) are watching us closely
	Final straw	If you say that an event is the final straw, you mean that although it is not important in itself, it happens after a series of similar unpleasant or annoying events, makes you angry, or makes you want to give up what you are doing.
	Screw	Unusual, strange, crazy
Infrequently used vocabulary	Synchronized	Match, do it at the same time and speed as each other
	Commiserating	Showing pity and sympathy
Terminology (e.g., finance)	Debt to equity ratio	The proportion of capital supplies by creditors (a person to whom a debt is owed)
	GNP	(Gross National Product) A single figure that sums up the yearly value of goods and services produced by a country, plus breakdown of these and on income, investment, savings, prices, etc.

**Table 2 (continued)**  
**Sample of Glossary Entries**

Type	Vocabulary	Definition
	Matrix management	A management reporting model in which a manager reports administratively to the local officer-in-charge but at the same time also reports functionally to a senior officer in the head office. E.g., a Marketing Manager in Hong Kong belongs to the Far East Division and reports to the General Manager of that Division, but at the same time, he has to report on all marketing matters to V.P.-Marketing at headquarters in New York
	Return on assets	Net profit after taxes divided by total tangible assets
	Return on equity	Either the profit a company makes compared to its value, especially the annual profit made compared to the total cost of its common stock, or the profit an investor makes or shares of stock or other
	Vertical integration	The control by a company of all the economic steps in the production of a product (from raw material to retail)

in the simulation. Because of sending and receiving information in their second language and because of unfamiliarity with the American business environment, the simulation participants required additional time to process information and make decisions. By extending the simulation time, we also allowed for the possibility that the participants would engage in consensus decision making.

Within the simulation run, we added two structured activities in order to maintain the dynamics of the simulation. The first activity was an executive lunch in which the participants were provided with lunch boxes in executive conference rooms. Simulation participants continued to work and exchange information over the lunch break. The second activity was a quarterly meeting in which all the

divisions met together in an executive conference room. At the meeting, the *Looking Glass* groups were encouraged to develop closure and formal lists of resolved and unresolved problems.

Although seven hours of non-stop simulation activities were very exhausting to second-language speakers, the energy levels of the simulation participants remained high and even increased over the duration of the simulation. During the later part of the day, the participants were working on constructive solutions to the identified problems. Our subjective impression is that the Hong Kong students emanating from a collective culture (Hofstede, 1991) took a much longer time in discussing and collecting information about the problems than do their American counterparts who represent an individualistic culture. Consequently, by the time that the Chinese participants had shared and discussed information widely by the early afternoon, they had created a momentum to continue towards developing a consensus in both difficult and less difficult decision-making areas. The longer time frame for the simulation did not lead to participants' fatigue but rather to a fuller and more valuable decision-making experience reflective of their cultural orientation. The executive lunch was a prime contributor to this sequence of the events as it provided a period to bring all the participants together informally, to allow them to reflect as they ate their lunches, and to establish a bridge to the activities bringing closure in the decision-making sessions in the afternoon.

We enhanced the realism of the simulation experience by designating English-only speakers who wore nametags clearly identifying them as such. This adaptation was a compromise as we could have required all communication to be in English. However, we decided to designate half of the students in each simulation run as English-only speakers for four reasons. First, we felt that the communication process would be slowed too much with a higher percentage of English-only speakers. Second, we felt that having a bilingual or multilingual environment more accurately represented the international communication environment in Hong Kong and thereby created a more authentic communication situation. Third, we felt that enforcing the English-only speaking rule would be

easier if only half the students had to be monitored. Last, this policy allowed students to compare their communication behaviour in first language (Cantonese) and in second language (English) because students were assigned as English-only speakers in one run and allowed to use their native language in the other. Ten observers from BAEPC Year-2 students were assigned to enforce the English-only speaker rule in each *Looking Glass Inc.*

We administered the simulation twice so that participants could experience and contrast their experience in managing at different organisational levels and in different divisions. The added benefit of this adaptation was to reduce the cultural reluctance of Chinese to participate actively in unfamiliar areas (Hsu, 1981). The first run provided initial exposure to the simulation and the basis for more active involvement in the second run. The participants who held higher positions in the first simulation run became more active and engaged as lower organisational participants (plant managers) in the second run. These students had familiarised themselves with simulation activities in the first run and also came to realise that the plant managers should be proactive rather than passive and reactive. Those participants assigned to plant manager roles in the first run and higher organisational roles in the second also tended to involve the plant managers in decision-making when they assumed higher level positions. Experiencing the plant managers' role provided the basis for using a participative and information sharing managerial style in the second simulation.

The realism of the simulation was positively impacted by bringing Hong Kong local and expatriate managers (business associates) to the simulation and assigning them roles as presidents and vice presidents. We added this change to the simulation based upon our observation of student behaviour and the analysis of the student reports from the first year. In the first year those assigned plant manager roles expressed some dissatisfaction and alienation from peers assigned as their superior managers. A common complaint of the plant managers was that they were designated as "gofers" and ordered to collect and bring data to their superiors.

They resented simply being assigned to gather information and being excluded from the organisational decision-making in what they perceived as an overly centralised organisation. In the process they resisted downward communication and caused frequent communication breakdowns and conflicts. The perceived reality of the simulation was compromised as the plant managers could not see the authenticity of accepting orders from peers and had difficulty in separating out and accepting that these peers were acting out superior organisational roles in the simulation. This change, we feel, facilitated the sorting out friend-friend and ruler-ruled relationships in the Confucian hierarchical relationships (Hsu, 1981) and the negative elements of high power distance (Redding, 1990).

The placement of experienced business associates in superior roles in the simulation eliminated the conflicts among participants at differing organisational levels, namely between the plant managers and their superiors. In a positive sense the alteration also was made to induce the plant managers to participate more actively in the simulation and to add realism to the interactions among hierarchical positions. Student participants occupying the higher organisational roles (presidents and vice presidents) captured only part of the cultural (Confucian) concept of hierarchy. Being superiors, these student participants correctly saw that their subordinates (plant managers) had obligations but did not adequately sense their mutual obligation to the plant managers. After the experienced business associates occupied these superior roles, the behaviour of plant managers changed significantly in that they no longer resented the authority of the superior managers and participated more fully in the managerial decision-making processes. The recruited managers executed a consultative managerial approach, emphasised two-way communication (downward and upward), and promoted decentralisation in appropriate areas. These managers communicated background information downward and expected that the plant managers would be the prime decision makers for those decisions directly impacting on their plants and at the same time would contribute to interactive deci-



sions impacting on the divisions and whole company. The young participants who were in their early 20s reflected their cultural orientation and Confucian conditioning by accepting the more authentic leadership style and concept of hierarchy as practiced by the experienced managers (after adaptation in the second year) and rejecting the less authentic leadership style and concept of hierarchy from their peers (before adaptation). The fact that these business associates also were older further authenticated their roles as superiors in the *Looking Glass Inc.* hierarchy.

### **Post-Simulation Stage**

Debriefing sessions are typically described as an essential component of behavioural simulations (Barker & Jensen, 1997; Lederman, 1984, 1992; Thiagarajan, 1994) but are often neglected in an experimental learning exercise (Lederman, 1992). To better fit the Hong Kong country-specific and disciplinary specific (BAEPC), the debriefings of the *Looking Glass Inc.* simulation put the emphasis on the theories and concepts concerning organisational and communication dynamics and leadership skills. Through reflecting on their interaction with the work they had done, participants commented that debriefing activities led them to a deeper learning (Biggs & Watkins, 1996); that is, the debriefing activities allow participants to share their insights with each other and compare their behaviour with their peers.

The debriefing activities provide an opportunity for participants to reflect on the simulation experience, share their experience, learn from other participants, and achieve closure on the simulation activities. The debriefing activities were modified to reflect that Hong Kong students are less likely to disclose fully their failures and perceived inappropriate actions because of the possibility of being subject to negative "face" behaviour (Bond & Hwang, 1986; Bond & Lee, 1981).

The post-simulation stage focused on self-reflection and experience sharing in group sessions and retention and application in an individual reflective paper. Our strategy was designed to overcome the Chinese cultural tendency to guard against disclosure of sensi-

tive information and their weaknesses and recognised that face-threatening situations might preclude the forthright discussion of potentially embarrassing communication encounters (Bond & Hwang, 1986). The post-simulation activities also focused on the retention and application of the simulation experience. The emphasis was on encouraging the integration and internalisation of the simulation experience by relating them to the life experience of the students. The post-simulation activities were divided into informal (after the first run) and structured debriefing (after the second run) phases. A "free-for-all venting frustration approach" was used in the first class session after the first *Looking Glass Inc.* run. The major function of this session (lasting for about one and half hours) was to allow participants to vent and release any negative emotions considered to be an essential stage before positive learning through reflection can occur. The focus of the discussion was on the communication processes in the simulation and on logistic problems.

In the structured debriefing we first emphasised the problems built into the *Looking Glass* simulation and their resolutions and subsequently organisational processes and individual behaviours. Care was taken to avoid "face" threatening situations in the debriefing sessions. As the problems were explored, issues of leadership styles, communication styles and strategies, and organisational hierarchy naturally emerged in the course of the discussions. Simulation participants prepared notes and drafts of reflective papers prior to the debriefing sessions, thereby enabling them to communicate prepared statements in the debriefing sessions. This strategy was a compromise because we realised that some data might be lost and that students would be less reluctant to speak openly if not forced to speak in spontaneous and possibly "face" threatening situations (Hsu, 1981; Bond & Hwang, 1986).

In the course of the discussions, mini-lectures were introduced to explain the Asian leadership and communication behaviours that emerged in the simulation. Management theorists dealing with the Asian management style were quoted and referred to in order to show how Asian managerial and culture practices differ

from those put forth by Western theorists (Westwood, 1992). The debriefing provided a forum for an explanation of cultural issues including "face," hierarchy, and communication styles and for participants to internalise and generalise their simulation experiences.

We conducted a structured debriefing, with horizontal and vertical strategies, in a two and one-half hour session after the second run. The aim was to achieve objective evaluation and critique without being clouded by the tension and aggravations generated by the new and unfamiliar experience of the first run of the simulation. The structured debriefing strategy focused on cognitive development by examining key aspects of horizontal and vertical communication within the simulated organisations.

The horizontal focus strategy brought together equivalent officers from all the *Looking Glass, Inc.* organisations to discuss their experiences; for example, six presidents from six *Looking Glass, Inc.* organisations. The discussion centred on comparing leadership style and communication climate in the division and in the total organisation. At the Director level, the participants also discussed the role of the Plant Manager (the lowest hierarchical position) in their own Division. Each group summarized its discussions and completed a discussion summary sheet that was circulated for use in the vertical debriefing sessions.

For the vertical focus strategy, students assigned roles at three organisational levels within each Division met to discuss assigned questions. Led by the vice president, the participants reflected on two aspects of performance in the Division. The first topic of discussion was the Divisional operational effectiveness in relation to the corporate issues (problems and opportunities) identified and solved by the Division. The groups also looked at the outcomes from the horizontal focus discussion and compared the work of their Division with the other *Looking Glass* organisations in terms of leadership style, communication climate, and the role of the Plant Managers (question added in the second year).

In a complex simulation such as *Looking Glass Inc.*, compressing the activities into a continuous stream of activities and having the entire simulation take place on a single day (as typical in the

United States) overloads the Hong Kong non-native English-speaking participants. By spacing the post-simulation activities over time and into distinct segments, students, we felt, were able to gain fuller value from taking part in the simulation. The informal debriefing, conducted after the first simulation, was primarily affective and allowed the more vocal participants to express and release their frustrations and tensions resulting from the challenges presented by the simulation. This informal debriefing exercise set the stage for follow-up analytical, structured debriefing exercises after the second run. The structured debriefing was formally conducted and lasted for about two and a half hours. The structured debriefing exercise supported participants' cognitions of horizontal and vertical communication within the simulated organisations and centred on comparing the leadership style and communication climate of the division and the corporation.

Between the simulation day and the structured debriefing session, the students prepared reflective papers that summarized their simulation experiences. These notes served as the foundation of the structured debriefing discussions. The time between the post-simulation activities allowed students to internalise the experience and to participate more completely in the subsequent activity. Our experience with *Looking Glass* in Hong Kong is that students remained receptive and even increased their enthusiasm towards the simulation as they realised its importance.

### **Limitations**

The research design of the present study did not employ experimental and control groups to measure precisely the impact of the adaptations as the Action Learning Project was geared toward educating all students. In addition, using a tighter research design would have stretched our resources and energy and introduced the difficulty of operating the experimental and control groups.

Since alterations began at the beginning and continued over a two year period, we do have comparable data on what would have transpired without modifications. Consequently, the improvements and their relationship to the alterations can only be

inferred by the positive results. We also were not able to measure the impact of individual modifications. To take one example, we cannot know for sure the effect of increased time allocation and whether shorter or longer allocations would have impacted the results. Taking the most critical viewpoint, critics could argue that the improvements accrued from a smoother administration of basic simulation and as a result of our gaining experience and skill in administering the simulation.

### **Implication**

*Looking Glass Inc.* is a complex American-based behavioural simulation that can be successfully adapted to the Hong Kong academic environment. Based on an explicit recognition of these differences, we introduced modifications in our administration of the *Looking Glass* simulation in Hong Kong. Modifying simulations to reflect these differences not only improves the realism of the experience for Hong Kong participants but also contributes to effective teaching and learning of the subject material.

Modifications of American-based simulations stem from the recognition that Hong Kong participants are undertaking simulations in their second language, possessing various levels of second-language competency, coming from different cultural backgrounds, and consequently practising different behaviours than American participants. Hong Kong participants do not share the contextual framework and background context assumed in American-based simulations.

Against the background and limitations of our study, we suggest that additional research be conducted and that supplemental teaching aids be prepared to facilitate the use of American-based simulation in Asia. The research could be directed at measuring and distinguishing how language, cultural, and context variables impact simulation effectiveness in Asia. The teaching aids could take the form of supplemental teaching materials (such as the glossary we prepared) and sections on instructors' manuals (such as background lecture notes we prepared). The suggestions can facilitate the more effective use of complex American simulation in Asia.

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