***Research Paper***

**Thai University Students' Perceptions**

**of Simulation for Language Education**

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**ABSTRACT**

Simulation, particularly social gaming, has become an attractive, popular, and familiar way to engage interest. Although part of ELT for some time, simulations seem to be attracting renewed interest as a teaching approach. Internet sites, such as Facebook, provide games where people own a farm, run a coffee shop, or a restaurant in the same community as their friends. This paper recounts a scenario-based “learning-by-doing” approach for undergraduate Thai students majoring in English, and examines student perceptions of their learning experience. Students were put in situations in which they had to run their business and resolve business scenarios that progressively built onto each other through the course. Using case studies and simplified Excel business models, students had to analyze their data to make business decisions and ensure the profitability of their companies. This sense of responsibility for success in a simulated world can be effectively transferred from simple games to language development. The researcher believes that a Thai student who studies English needs to acquire a new manner of behavior expected among English-speakers, which includes assertiveness, critical reflection, and self-expression. Based on results of action research conducted by the researcher in a Thai university class, this paper suggests that simulation is a powerful method for an L2 learner who cannot experience the culture of the target language in order to acquire important socio-cultural aspects of communication.

**Keywords:** business; education; EFL; game; learning; problem-based; simulation

# Introduction

It is commonly considered that students of English often master English in terms of its linguistic structure but have many problems in intercultural communication. This article suggests that simulation methodology assists L2 students in the improvement of socio-cultural aspects of communication, as well as linguistic competence. Simulation resulted in a more competent use of the English language for business environments as L2 students learned to express their ‘common sense’ reasoning and communicative procedures. In this article, the term simulation is used as a generic reference to experiential learning activities, commonly labeled simulations, games, simulation-games, and role-play.

The simulation exercises were created following the guidelines of Inbar and Stoll (1972) who emphasized goal setting, structuring of constraints, and allocating resources. The learning objectives were accomplished by providing realistic, but controlled, environments in which students were guided only by implicit rules of common sense. By observing students behaviour and self-reflection of their L2 learner game participation, participants utilized their ‘common sense’ reasoning and communicative procedures to complete the games. (Sharrock & Watson, 1985)

Considerable effort was put into the design of educational simulations to ensure that students were exposed to designed stimuli that encouraged them to acquire the key concepts of the subject area being taught or the specific technical skills for which they were being trained. Simulation is defined in this paper as “a language model which allows students to express themselves to their peers in a group setting, groups comprising usually three or four. It is related to Role Play, but in Simulation students retain their own personas and are not required to pretend to be someone else.” (Colaiste Ghaidhlig na h-Alba, 2009)

This paper is an introductory step towards an evaluation of the effects of simulation in L2 English language acquisition by Thai university undergraduate English Major students. It is hoped that this paper will commence further research that will provide the required data for a thorough ethno-methodological/conversation analysis.

# Literature Review

This review begins by defining the relationship between critical thinking and language acquisition, and reviews the connection between socio-cultural communication behavior practiced when critical thinking patterns are developed through simulation.

## The relationship between critical thinking and language acquisition

Sacks, Schegloff and Jefferson (1974) advanced ethnometholodgy, an approach to conversation analysis derived from sociology. It argues that conversation has its own structure and rules and examines methods used by speakers. Work by Sinclair and Coulthard (1975), in their analysis of classroom conversations, identified exchanges, consisting of initiation, response, and follow-up or feedback. Montgomery (1995) introduced ‘ritualised exchange’, based on the speech act theory of Austin (1962) and Searle (1969). Brown and Levinson (1978) suggested that an understanding of cooperative conversation is necessary for imparting meaning and maintaining relationships. L2 students need to recognize these subtleties in a language before they can fully understand rapport and interpersonal involvement, such as jokes or sarcasm. Forrester (2008) suggests that in order for students to move beyond mere reproduction of others’ ideas they must be given “the motivation to think, the time to develop ideas, and the collaboration and support of a learning community that provides information, feedback and encouragement” through both creative and critical thinking.

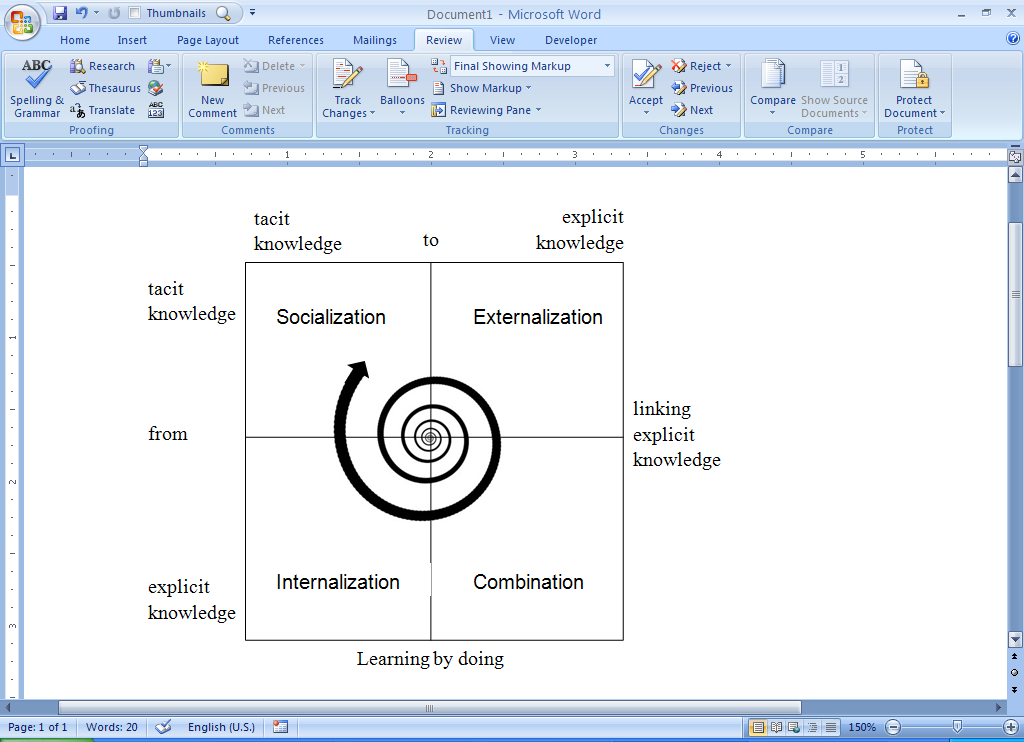
Critical thinking advocates inquiry, thinking, and learning rather than in the accumulation of disconnected skills and incomplete knowledge. Facione (1990) in the Delphi Report, a consensus definition of critical thinking for purposes of college level teaching and assessment, proposes critical thinking is a “purposeful, self-regulatory judgment which manifests itself in reasoned consideration of evidence, context, methods, standards, and conceptualizations in deciding what to believe or what to do.”

Meyers (1986) observes that for a learning environment to encourage the development of critical thinking there must exist the stimulation of students’ interest, the creation of meaningful discussion, the exposure to the thoughts and views of others, and the fostering of a supportive and trusting atmosphere. Sternberg & Lubart (1999) find that students’ academic performance improves when the learner is assessed in ways that value and recognize creative abilities. Walker (2003) observes that after debating, students reported improvements in literature searching, weighing risks and benefits of treatments, and making evidence-based decisions. Black (2005) suggests that students need opportunities to analyze their own thinking according to standards of clarity, accuracy, relevance, logic, and fairness. Moreover, she notes that teachers should give necessary information and thinking tools to solve problems that focus more on affective and cognitive features of learning. Simulation is one technique that can provide scaffolding for students to think critically, distinguish opinions from facts, evaluate evidence, and allow intellectual independence.

## The relationship between simulation and the development of socio-cultural communication

L2 learners must understand the textual, social, and psychological context of a target language in order for the language to become meaningful and unified. (Cook, 1989) Using correct syntax in correct order is a major threshold before students can advance in appropriate communication in that target language because social relationships are as diverse ion cultures as are the languages from those cultures (Brown & Levinson, 1978) How can an L2 student easily learn the idiosyncrasies, maxims, and styles of the target culture?

Much debate in recent years has focused on cultural exposure to attain acquisition. Krashen 91982) suggests that grammar study (learning) is less effective than simple exposure (acquisition) and even went so far as to suggest that simply learning rules of grammar, spelling, or vocabulary does not necessarily result in actual competence or language acquisition. Language grammar is only valuable AFTER students have acquired sufficient language.



Nonaka & Takeuchi (1995) explain how tacit knowledge informs and becomes explicit knowledge by a four-phase knowledge development cycle, SECI. These four stages are (1) Socialization, or the sharing of individual tacit knowledge; (2) Externalization of tacit knowledge, creating new justified concepts of codifying techniques, such as analogies or stories; (3) Combination, in which archetypes (or prototypes) of new concepts are developed and incorporated; (4) Internalization of this new knowledge through learning by doing and experimentation, rendering the new knowledge once again tacit.

Figure 1: Four modes of knowledge conversion and the knowledge spiral (Nanaka & Taskcuchi, pp.71-72)

Willingham (2007) observes that even though a student can receive instruction about what he/she ought to learn, without using his/her own background knowledge and practice, the student will not be able to implement the concepts received. A language teacher needs to develop familiarity with the grammar of a language, not by teaching the grammar directly, but rather by providing comprehensible input, allowing ‘surface knowledge’ to become ‘deep knowledge. (Willingham, 2007)

An L2 student who has little opportunity to experience the target culture of the target language may find that a simulated environment stimulates the evolution of tacit knowledge into explicit knowledge, leading to a deeper understanding of socio-cultural concepts of that target language.

# Methods

## Description of Business Simulation Model

In an attempt to engage L2 students in learning and using English as a preparation for international business situations, simulation methodology was implemented to help reinforce complex business concepts. Blaylock & Hollandsworth (2006) observed that for effective learning transfer to occur, the student should be able to “analyze problem solutions, generate ranges of opinions, implement a range of solutions, and evaluate the solutions for growth.” Thais appear to be behaviorists by nature, and thus this method of teaching seems suitable for Thai students. While theorists and academics have debated methods for language learning, more research is required on the L2 learner’s experiences and attitudes of simulation. This paper focuses on the student’s understanding of what they have gained from the course - the perceived value of simulation by the L2 learner.

The course used one main Excel file (InterComp Business Simulation.xlsx) as part of a gradual progression for students to understand some of the issues corporate managers face in international business. Piaget suggests intellectual growth requires assimilation, whereby the student takes the information received, changes it, and makes it become part of the student’s knowledge.

# Classroom Used in the Study

The modeling exercises were employed in a 45-hour English language course for fourth year undergraduate Thai students, in two 90 minute lessons per week over 15 weeks. There were 32 students in the class, of whom 26 were female and 8 were male. At the commencement of the course, students divided themselves into groups of 4, each student taking on one of four roles for their company: CEO, HR Manager, Production Manager, and Secretary. A list of company groups and student roles can be found in Appendices. Final sessions were videoed, and published at  [http://dpu.4shared.com](https://mail.dpu.ac.th/owa/redir.aspx?C=23737973f92d49638d0658a2a0aa65c6&URL=http%3a%2f%2fdpu.4shared.com" \t "_blank)  in order for the students to do self-analysis, and course reflections.

## Questionnaire

In an attempt to limit any influence on the student’s responses, open-ended questions were offered as opposed to a forced-choice questionnaire, so that student expressions of course experiences could be observed without too much interference from the researcher.

The questions covered the following four areas: the most interesting project, the project which the student could express ideas the most, the project which gave the greatest sense of personal responsibility, and the area of knowledge the student was proud to have learned.

SELF-ASSESSMENT QUESTIONNAIRE (SAQ)

**EN370: Current Events in Business**

**INSTRUCTIONS: Read the following 4 questions carefully, and write your responses in complete sentences. Your answers should be 5-10 sentences (or so) long. You may use single-space. Some questions contain choices, so please consider the options carefully before beginning your response.**

**Please return your questionnaire to Aj. Timothy no later than the date of the EN370 final lesson, 16 September 2010. This form is also in LSS under Teaching Materials, so you may type your responses and email the attachment.**

1. **The Most Interesting Project**

Look back over your writing for this course. Choose one report that you wrote that you believe represents a good example of handling a specific project. *Optional*: If you like, you may compare or contrast this assignment with a less successful effort in another assignment.

1. **The Project you Expressed Your Thoughts the Most**

Review the reports you wrote for this course. Choose one in which you feel you expressed your thoughts and ideas most effectively. Describe the decisions you made regarding vocabulary, style, tone, syntax, and audience that made your expression work well. *Optional*: If you want, you may compare other reports you wrote for this course in which you feel your expression was less successful.

1. **The Project/Assignment with the Most Responsibility**

Describe project/assignment which gave you the greatest sense of responsibility. Identify TWO areas of involvement (feeling of responsibility, importance) that you had when working on your tasks this semester. Provide a specific example and explain why you found this meaningful.

1. **Open Question**

Describe one thing that you learned about current events in business this semester that you are really proud of or that you thought was especially important. Talk about how you came to identify this issue and the process you went through to learn it.

# Results and Discussion

## Word-count Evaluation

In an attempt to evaluate opinion by the use of key words, a simple word-count evaluation was performed on the comments and reflections from the student self-assessment questionnaire. The following words were significantly repeated in the Open Question section of the students’ responses.

A realistic working experience of finance and business, along with a sense of personal responsibility, seems to be the most repeated ideas expressed in a simple word-count analysis.

| **Word** | **Times Used** | **%** |
| --- | --- | --- |
| company/ companies | 51 | 16% |
| bank/banking | 33 | 10% |
| work | 33 | 10% |
| real | 30 | 9% |
| responsibility/ responsibilities | 28 | 9% |
| important | 25 | 8% |
| knowledge | 19 | 6% |
| money | 19 | 6% |
| understand | 15 | 5% |
| life | 14 | 4% |
| study | 9 | 3% |
| trade/trading | 8 | 2% |
| team / teamwork | 7 | 2% |
| merger | 7 | 2% |
| help/helpful | 6 | 2% |
| meaning | 6 | 2% |
| problem | 6 | 2% |
| benefit | 3 | 1% |
| solve | 3 | 1% |

Keywords: all 20 keywords are used 322 times

Source: Student perception comment results.xlsx

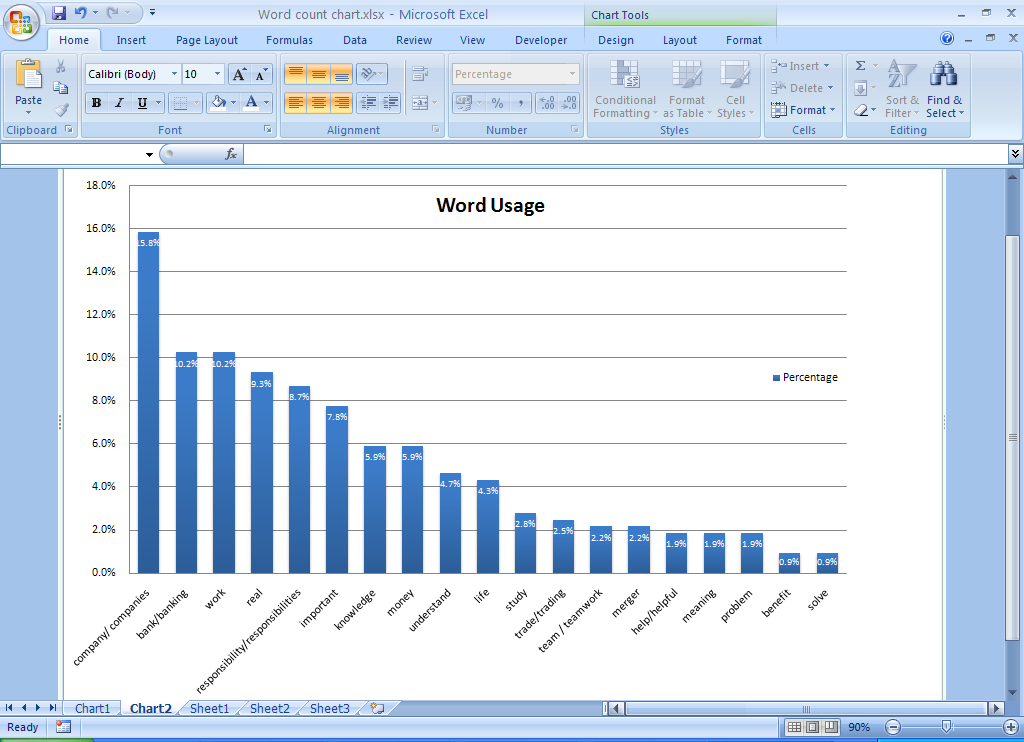


Figure 2: Key Word Usage (Total: 3,313 words)

However, the L2 students have only an intermediate knowledge of English along with a limited capability for using key words to express their full range of attitudes. Therefore, a more thorough analysis of the comments is required. This is discussed further in the student response evaluation.

## Student Evaluation of Course Content

Once the L2 learners had completed their Self-Assessment Questionnaires, observations and comments about the course were extracted and analyzed. An overview of the content in each of the four sections to the course, (Trade, Governance, Banking, and Growth/M&A), are described in Appendices. Below are the findings along with some pertinent comments. The total number of student respondents was 31.

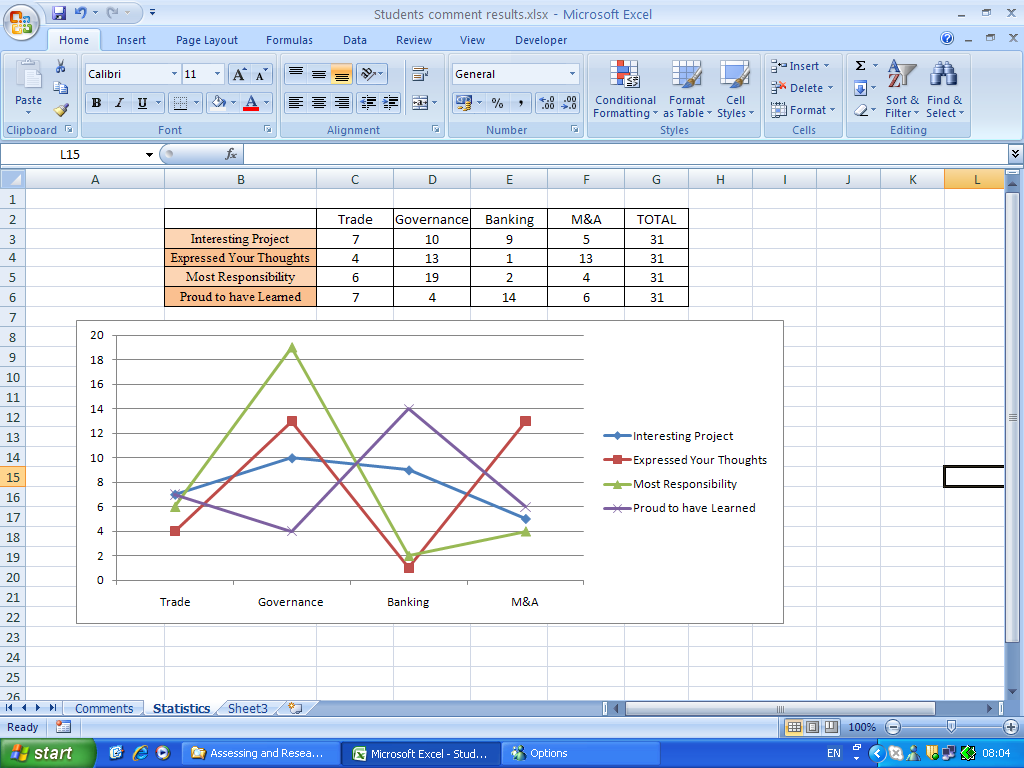


Figure 2: Student Preferences

Source: Student perception comment results.xlsx

## Most Interesting

Generally, students were equally divided over the most interesting project. Governance and Banking won by a small margin, apparently due to the immediacy and relevance of the simulations.

The topics and games were current and realistically familiar for students to consider the scenarios as valuable training for “real life”. Through discussions in teams, students could resolve problems and consider how they would deal with financial issues, should they actually occur in their careers. The topics of inflation and risk management seemed to be distinctly important and applicable to most students.

Assimilation appeared to have occurred as students identified scenarios with events they have observed in the world around them. Students add that adaptation of the lessons learned will be useful them as a result of the simulated scenarios.

Additionally, the process of solving issues encouraged teamwork, as well as interest. Immediate implications of changes considered could be seen calculated in the Excel sheets the accompanied many scenarios, so students could discuss, adjust and correct their discussions as they improved their solutions in computer-calculated worksheets.

## Most Expressive

Both Governance and M&A (Mergers and Acquisitions) were considered projects for which students could express themselves the most as they convinced ‘employees’ and ‘shareholders’ of the positions taken by the company board members. Choice of words, tone, intonation, and stress were areas of focus for each student so that audiences understand the student’s reasoning more clearly. Students dedicated much time and effort to their preparation in order to deliver thorough and convincing arguments, using “serious tone” to show the audiences that it was “a serious situation.”

## Greatest Sense of Responsibility

Students expressed that the Governance project, in which students managed severe and disruptive scenarios in their companies, provided the greatest sense of personal responsibility. Through the various scenarios experienced, students adopted personal responsibility for their company and its employees. For example, the factory explosion simulation provided awareness of life and death decisions, including how to compensate families for their loss. Students closely identified themselves by their roles as they combined imagination and empathy to form a sense of duty which spurred each student to “help and solve many problems in our society”. (Student 12)

Leadership skills were developed as students naturally choose the leader role for their group, whether they were designated as CEO or not, simply because the group “has to have a leader” and students “do not want my group disappointed to me.” (Student 8) As students became identified in their roles, group accountability developed, challenging students to study harder, as they planned what to do, assigned work within their groups, and checked the material before handing in the work.

Students also developed negotiating skills and adjusted policies in order to achieve agreement. This was observed most clearly in the wage negotiation simulation when role-players had to use incentives in order to influence outcomes, such as offering employees fitness centers, heath insurance, and bonuses to employees to compensate for wage reductions.

## Area Most Proud to Have Learned

Banking was a new topic which students were most proud to have learned. They studied economic concepts and terminology which, if confusing at first, spurred students to find examples and explanations to help them summarize in their own words in order to verify for themselves whether or not they understood the target language.

Simulations were considered realistic and relevant, preparing students for events they are likely to encounter in their careers. Realism was maintained as students calculated turnover results for group decisions in the International Business Monthly Calculation Excel file which “made all the group’s work feel more professional.” The topic of inflation was considered valuable as students could connect to their own spending for goods and food on a daily basis.

Simulations created environments for students to gain an appreciation of attitudes in business and how to work in a good and successful company. The games provided insight into handling stress, the limitations of time and resources as well as creating the processes and structures for businesses to evolve, resulting in students feeling as if they “grow up more than in the past.” (Student 19)

## Student Evaluation of Behavioral Adjustments

C.H. Cherryholmes, (1966) suggested five hypotheses that can be applied to language acquisition: interest, learning, retention, critical thinking, and attitudes. Cherryholmes concluded that, when compared to conventional classroom approaches, only interest in the material being learned by simulation participants improved significantly. However, this researcher believes simulations are more than simply useful tools for retaining material and stimulating interest. Simulation stimulates the expression of attitudes and develops personal responsibility in the L2 learner.

## Motivation to Research (Learning)

Simulations resulted in a greater effort by students to do research into the subject matter. Personal involvement caused each student to embark on more thorough research from various sources around the topics. Writing convincing responses forced students to find data through examples and case studies to support their ideas and ensure they could explain their position clearly.

A sense of realism of a scenario highlighted the need for factual confirmation of details which could only be obtained through additional student research. For example, choosing a new market location required consideration of possible options in order to decide on the most suitable outcome. Thus, students used considerable time and effort to acquire the knowledge they felt was sufficient for successful problem resolution.

When faced with knowledge-gaps, students voluntarily sought and compared additional data until they felt an adequate level of understanding was achieved.

## Improved Vocabulary (Retention)

Retention, or the ability to recall or recognize what has been learned or experienced, requires increasing intervals of time between subsequent reviews of previously learned material. The increased level of new vocabulary “I never heard or know before” indicates a certain degree of retention occurred. This process of retention required deduction and critical thinking in order to understand and apply the vocabulary correctly.

The desire to complete tasks effectively and successfully convince audiences stretched the student’s use of new vocabulary in order to explain new conceptual positions held in each simulation. Each student worked to “make the audience understand” which resulted in the, “vocabularies, style and ideas show how my thought has improved.” (Student 29)

## Training of Reflective Evaluation (Critical Thinking)

Facione (1990) defines critical thinking as “purposeful, self-regulatory judgment”, or tool of inquiry which is necessary to clarify goals, examine assumptions, discern hidden values, evaluate evidence, accomplish actions, and assess conclusions. Students in the class used critical thinking in order to evaluate their arguments and present their opinions as valid based on individual premises. Students showed detailed consideration of issues that could affect their company, such as country location, recruitment opportunities, concerns over any possible limitations or disadvantages to options available, analyzing lifestyles, benefits, and manufacturing factors that would support the processing of production, utilities, and transportation. Many of these issues were never discussed in class, but reached by students as they contemplated the survival of their company, as Student 22 makes clear, “If I make the wrong decision, our company will have many problems or I will lose the company.”

Reflective evaluation required examining assumptions used by managers who had experienced similar situations. Students assessed similar incidents that had occurred in reported events in order to support their position, evident most clearly when students were faced with handling product and personnel simulations.

The process of discerning hidden values was evidenced most clearly when deciding redundancies, wage increases, and company mergers. The consequences of actions were considered carefully in an effort to accomplish desired action without excessive conflict, “looking for best way for everyone ‘win-win’” (Student 10). The Banking simulation showed the widest combination of evaluating evidence, discerning hidden values, and assessing conclusions in order to gain desired action as students considered how best to persuade people to borrow from their banks.

Critical thinking was not only carried out at an individual level, but also in groups as students worked collectively to identify the issues, discuss, debate, brainstorm, analyze, and decide how best their team could solve the problems their company faced.

## Responsibility (Attitudes)

Simulations produced a sense of reward and risk. The prospect of group success or failure encouraged teams to work harder. Students connected the risk of their company going bankrupt or their scores being cut if projects were not finished on time with the fact that companies, and ultimately markets, will penalize employees for poor effort. Equally, students recognized that hard effort was rewarded.

Simulations provided a sense of immediacy and reality to the concepts being learned, particularly when roles were maintained throughout a class session. As this assumed reality continued over time, students felt more responsible to their roles, and performed accordingly.

Students met self-imposed demands, as their sense of duty for their group’s success encouraged them to discuss details with friends and search for answers in libraries. Incentives for group success stimulated effort to acquire knowledge and learn to use the English terminology.

Responsibility for company success stimulated cooperation among the members of each group. Difficulties and conflicts were handled over time so that the group would maintain its strength. “everybody had preparing of each person and every member help the member to solve of this project…we had to be teamwork…if I had no responsibility or someone in the group had no that, project was not accomplished.” (Student 6)

Students showed concern for the personnel and workers under their care, and the ramifications for their employees should their company fail. This sense of social responsibility for the workers and the communities surrounding the simulated company was not intentionally developed by the researcher but rather observed as developing voluntarily by the students, one of whom explained “because I am the one who hire them.” (Student 18)

# Conclusion

Simulation is a potentially important method for L2 language learners who cannot get first hand immersion in the target language and culture. The paper has outline a business simulation in which Each ‘game’ provides the necessary protection of a sandbox environment for a student to experiment in action and social interaction, thereby gaining training and experience of socio-cultural aspects of communication in the culture of that language. For example, when studying English, a student not only has to learn new language syntax, but also a new manner of behavior that is expected among English-speakers. This behavior includes assertiveness, critical reflection, and self-expression, which are not commonly found in normal Thai culture, and use of these three traits appropriately when using English.

Simulation provides the necessary scaffolding for a safe experimental environment, motivated study, appropriate socio-cultural interaction, and ethical awareness to issues faced in the target language culture.

Firstly, simulation creates an environment whereby a student can actively use English to communicate and handle issues he or she has not previously encountered. While the scenarios are familiar in topic and relevant to each student’s immediate future, they have often never been considered by the student in terms of appraisal and resolution.

Secondly, simulation exercises help stimulate students to research as they 'play' games and solve problems, encouraging the study and self-reflective processes required for intellectual growth.

Thirdly, simulation provides environments to test socio-cultural aspects of communication in the culture of the language being learned. In this project, students can become aware of the terminology and ideas required to at least communicate, if not also to handle, common problems in large-scale businesses. Such communicative skills can assist English Major graduates to be more useful to corporate managers as they appreciate the issues their managers will handle on a regular basis.

Fourthly, simulation creates a sense of personal responsibility and advances L2 learner language development in areas of ethical decision-making as students express their ethical standpoint to the concepts and terminology they are learning. Personal social responsibility and accountability took over from the operational responsibility that was originally assigned to the students by the researcher, as students “take care about the social responsibility more than private responsibility.” (Student 12)

expected

path

actual

path

task

analysis

task

resolution

task

responsibility

personal

responsibility

Figure 4 Research Model

In many instances, students expressed a profound sense of responsibility which developed as they lived through the simulations. For example, after a factory explosion there were “a lot of dead and injured workers. I have to pay compensation to them for 3 months. I have to let other workers stop working because of air pollution around the factory. I have to care more about their health first.” (Student 29)

Simulation creates a learning environment where there is reduced risk for learners to make mistakes, provide scaffolds to help the learner to build self confidence and helps learners reflect on their mistakes, speculate on root causes, and intelligently design alternative solutions. This research observed significant improvements in student evaluation, learner motivation, attendance, and engagement as well as increased learner competence driven by a greater sense of personal responsibility than evident in conventional classroom teaching.

The experience of learning through simulation developed each student’s English skills as the student considered the topics as relevant and useful for daily life, at times sharing new knowledge with friends in his/her free time. Student 12 concludes, “I learnt about many current events that could be occurs in my business. Firstly, I could think and solve the problems by many ways that my business can do it as well as possible. Secondly, I could take these current events to use in the future when I working in a big company. And finally, if I meet the same current events in the business, I will try to suggest some people to do in the best way. All of these current events made me had a general knowledge about how to solve the problem that probably likely in the business and I believe that I will do it successful.”

# Further Research Required

Students who participated in this research expressed a greater awareness of ethical involvement at a personal level, in studying English, and at a professional level, in solving social issues facing businesses.

Simulation in teaching cannot be seen as a substitute for conventional classroom teaching, but rather a valuable addition to the complete education of the student. Just as analytical skills and retention are rehearsed and fashioned in conventional classes, analytical skills and ethical awareness are forged in the furnace of responsibility as students are exposed to simulation.

The question of the effectiveness of training, or how to measure learning, remains. Anderson and Lawton (2009) indicate that little progress has occurred in objectively assessing cognitive learning in simulations and call for research that might help determine whether simulations accomplish what they purport to achieve in terms of participant learning. In this research note, only subjective measures of student perception to learning are presented. The results of objective measures of learning would be valuable as a comparison. It may be possible to use various methods, such as the La Trobe Communication Questionnaire, in order to assess consensus of perceived learning.

Measuring the effects of cognitive learning by measuring solutions reached and expressed at commencement and at conclusion of both conventional and simulation courses would bring clearer indication as to the value of simulation in teaching.

It might also be useful to measure the level of student involvement if they participate in the actual design experience of the simulation. Druckman and Ebner (2007) suggest that allowing students to participate in the design process of a simulation may capture Crookall’s features of creativity, involvement, and concreteness, Crookall (1995), and encourage a more active interest in the material to be learned.

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# Appendices

## Appendix A: Quotations

| Section | Quote |
| --- | --- |
| Introduction | W. W. Sharrock and D. R. Watson. System Vol 13. Vol 1. (1985) Great Britain 1985 Pergamon Press. p.195 article ‘Reality Construction' in L2 Simulations’ - “transaction of a simulation game unrelievedly requires that participants utilize their currently based ‘common sense’ reasoning and communicative procedures.” |
| Methods | Baylock and Hollandsworth, (2006). Engaging Students in the Quantitative Classroom, p.2. Effective learning transfer requires “the abilities to analyze problem solutions, generate ranges of opinions, implement a range of solutions, and evaluate the solutions for growth.” |
| Most Interesting | Student 24, “We had to evaluate money that how much money our company loses after chemical leak happened. We had to solve the big problems together and also discussing together. All about this project makes me think carefully because if these problems come to my life, I am sure that I can solve these problems very well.” |
|  | Student 4, “I can see and use it in my real life. I think it is important for me to know about this. I can use this knowledge in my life.” |
|  | Student 15, “in the real life, we have to make trade, and we will meet it certainly. Also, it will make me can adapt in my daily life.” |
|  | Student 2, “My feeling excited and do it best to creating of product, solution of product, or manage of money.” |
|  | Student 7, “we had to discuss as group to choose a new market location and try to change a number in a table to be a proper number by calculating.” |
|  | Student 2, “shared own idea that think how we do our company better so most of project emphasize team work, and I like to do it.” |
| Most Expressive | Student 4, “Some points in my area were so hard to decide the risk level and the reason. This is what made this report challenging. When I presented my part to audiences, I also tried to use the simple words as much as possible, so that my audiences will understand my reason in each point easier.” |
|  | Student 19, “When I present in front of the class I will use the serious tone of voice and give the good reason or power word that make the audience interest and follow with my ideas.” |
|  | Student 18, “When we’re presenting, we giving the idea or reason to the audience that’s why we won’t merger that make the audience understand us.” |
|  | Student 9, “I had to read those many times in order to make sure that I would explain to the other with an easy way but they could understand…I had to use serious tone during my presentation to show the audiences that it was a serious situation.” |
| Greatest Sense of Responsibility | Student 12, “I could think and solve the problems by many ways that my business can do it as well as possible…we should help and solve many problems in our society by any way that we can. So, in this essay made I interested in any campaigns that can help the social better.” |
|  | Student 26, “I feel like it is my duty to see the problem and manage it as my response or duty. I have imagined if the problem is real happen.” |
|  | Student 25, “I had to plan what we are going to do, to assign works to others and to check out everything on projects. So I think I placed importance and responsibility on every project.” |
|  | Student 21, “In my opinion, opening new company is difficult, but how to continue the company is more difficult than that.” |
|  | Student 25, “If it could not be 25% as they wanted, I had to find the ways to negotiate with them for example we will give them fitness centre, heath booth, and bonuses. I think if it really happens, how should I do?” |
|  | Student 11, “My greatest responsibility is to expand the area for our new company. To be a production manager made me feel powerful.” |
|  | Student 27, “My responsibility is to take care of the production of company.” |
|  | Student 19, “I am a Production manager of Herb PADS Company.” |
|  | Student 3, “HR is the main position about create about salary, take care my employer because the employer is very important for our company. I feel excited and proud to do it.” |
|  | Student 25, “I was the CEO of the company so I have to be responsibility for every project. The CEO is a person who decides what projects are going to be and how to finish those projects successfully. As my position for the group, I had to plan what we are going to do, to assign works to others and to check out everything on projects. So I think I placed importance and responsibility on every project.” |
|  | Student 8, “My group has to have a leader, so I have to be a leader to organize work for members in the group. It made me more responsible than before and I do not want my group disappointed to me. It is an important role in the group. Even though I divided work in the group but before I submitted I had checked the correct work.” |
|  | Student 21, “I did not to concern about money that I will get, but I really care about my personnel and worker in my company. Because if I continue my company until my corporation is closed, imagine that how many people will lose their job, how many families will meet the trouble.” |
|  | Student 18, “I have to have much responsibility with the employees or workers because I am the one who hire them.” |
| Most Proud to Have Learned | Student 25, “I didn’t stop at what Aj. explain but I tried to read more about fractional reserve banking and tried understand this topic on the excel sheet. I wrote the explanation of fractional reserve banking in my own words for an assignment and also I can check whether I really understand or not.” |
|  | Student 26, “That is quite challenge me to maintain the good part of our company meanwhile maintain the money of company. Luckily, it is not real. If it is our company in real life. It may cause me get headache so much.” |
|  | Student 22, “I can solve this problem very well because I imagine that this problem happens in my real life, and I will be responsible for that. I have learned about how to make a business, and how to organize my business, and how to know the process for making good business.” |
|  | Student 29, “One thing that I am really proud of it is inflation because I follow it well. I think inflation is a thing that is close to me because I have to spend money to purchase goods and food every day. So I have to know and understand it. It’s helpful for my daily life.” |
|  | Student 19, “I love every project/ assignment because it makes me have a strong thinking and grow up more than in the past.” |
| Motivation to Research (Learning) | Student 8, “I have researched the information about overseas where is the interesting places for the new market locations project… because the research of the information made me know more the information of many countries that I and my members in the group have chosen. It made me know how to work as a company…I feel like a real company in the real life.” |
|  | Student 7, “I love to write which followed this problem such as respond a demand of population, maintain environment originally. Therefore, I had to find some ideas in sources and created new ideas which covered to solve all problems.” |
|  | Student 9, “Besides studying in class, I had to find another resource that related to my assignments in order to get more examples and make me understand clearly…I had to read those many times in order to make sure that I would explain to the other with an easy way but they could understand.” |
|  | Student 10, “I had to research information on the Internet and books. This made me get much knowledge.” |
|  | Student 15, “I spend much time to understand. I find the information from the internet both Thai language and English language, ask my friend, read textbook and power point from teacher.” |
|  | Student 19, “I research many website to find the great example or the policies that the company give/do for the social.” Student 9 (CEO) agrees, “I had to find some of chemical that would be suitable for my factory.” |
|  | Student 16, “I couldn’t understand it in the class, so I read about it on Wikipedia for the additional information which somehow made me more confused because Wikipedia told me the different thing from what I learnt in the class. However, I can find the similarities between two resources and finally understand the Fractional Reserve system and able to finish the assignment!” |
|  | Student 21, “I learned this issue by search on the internet in many website to make sure the history of the topic.” |
|  | Student 26, “I proud of many things in this course. For example, Merger and Acquisition, Social Responsibility, History of Money. Especially history of money. Because there is a lot of information I have to read and summary it in very few words. So, it takes so long time to finish it…I cannot explain as much as I understand and I decide to look for some information on internet and apply some of them in my research. That is making me to read more and more to make more comprehension.” |
| Improved Vocabulary (Retention) | Student 12, “I must thought hard in about information of other company that my company must the merger with them. I tried to think about risk in any situation that high or low and it likely or unlikely. So, there were many vocabulary and style that made my expression work well.” |
|  | Student 17, “I began think about the vocabulary that can make the audience understand and clear about my information.” |
|  | Student 15, “I know more about vocabulary of business that some words I never heard or know before.” |
|  | Student 14, “This report I use easy vocabularies to tell the audiences who are workers. That makes them easy to understand.” |
|  | Student 29, “…my company that I establish looks more real company. It’s not the company that I just pretend to make. The vocabularies, style and ideas show how my thought has improved. I’m proud of this.” |
|  | Student 26, “There are a lot of vocabulary I don’t know the meaning or even I know the meaning but the sentences are hard to understand by meaning of sentence. I have to guess and look around the contexts to get the meaning but it practice me a lot in reading and summary.” |
| Training of Reflective Evaluation (Critical Thinking) | Student 22, “I have to think that if the risks are so high, what I should do because if it happens in my real life, I have to solve this problem. So, this project is really important for me because I have to discuss with the member in our group that our company should merge with P&G or not. If I make the wrong decision, our company will have many problems or I will lose the company. So, this project makes me look more powerful and stronger.” |
|  | Student 10, “I had to think of the solutions of the problems, looking for best way for everyone “win-win”…made me think in many ways of benefits and risks of merger. Problems of merger such as workers may not like new rules and leave.” |
|  | Student 13, the company creation simulation, “made me to think about idea such as the new country that we want to locate the factory. This project practice me to consider about appropriation of product for the new market unit, analysis their life style and factors that support the processing of production, utilities, and transportation.” |
|  | Student 1, “if our company merger with another company and CEO has to go out from the company. That CEO is me. We have to think clearly because CEO doesn’t want to lose the job too.” |
|  | Student 29, “Before, I think about product, I have to search information about market that.” |
|  | Student 4, “I put my ideas and used the real situation to support in my report.” |
|  | Student 16, “I have to decide by myself on how much people should I keep? How much people should I cut out? And how much should I raise up the wage? However, I have fun time analyzing the result of each of my decisions. I came up with two ideas: accept the worker request and raise the wage to 25% and cut out many staff. Another one was raise the wage by 10% only, so I can hire more employees. In the end, I chose the second option for my group.” |
|  | Student 31, “I try to choose the city and consider about how rich or poor of people in each city and located. I have to imagine that I am a bank owner and think of deposit amounts, interest rate. I have to give low interest rate for persuade people to borrow from my bank.” |
|  | Student 18, “we have to work in group but all of my group have their own idea. So, we have to discuss together (brainstorming).” |
|  | Student 13, “Everyone in the team has to think about the reason of each issue which was assigned and it has to be connected with each other. The importance of this is the content of the reason which has to be relevant and connected to the other members. It is the base on working with team too.” |
|  | Student 6, “When we had to do homework be teamwork, everybody has duty to do work of each person. Intelligent, you teach us be intelligent person because everybody has to brainstorm for assignment will be accomplish.” |
|  | Student 7, the team had “to analyze and discuss how to solve problems about chemical leak. As you know, it is not easy to solve these problems because it had to realize other factors.” |
|  | Student 27, “we discussed in many things such as the problems happened, how to solve and what we will do next. So we show the ideas to our friend in class that our company is very strong. Although, our company had many problems but we can pass and manage about it well.” |
|  | Student 6, “we know about the solution of the problem, if we meet a big problem of the factory.” |
|  | Student 26, “all of the things that you teach me are very important thing in the real life for doing the business.” |
|  | Student 8, “One thing that I learned about current events in business and I am really proud, that is how to be a good and successful company.” |
|  | Student 20 (Secretary) says, “Before I learn this subject, I have an idea that is businessmen are really really comfortable because they are only Sign their name in the casebook and then drive an expensive car to party or go travel around the world, they that is the stupid thinking because they have to think a lot, plan a lot, search a lot and pay time a lot for business work.” |
| Responsibility (Attitudes) | Student 21, “If our project was not finished on time, so our group score was cut, if we worked in the real company we were complained from our boss or the company might fire us out. Because we did not have responsibility to work.” |
|  | Student 14, “the company can go bankrupt if the production has problem or has trouble.” |
|  | Student 4, “As a secretary and I must be wrote the summary about the situation and the minute of meeting. I am a secretary in that time because if I wrote wrong situation other person misunderstand.” |
|  | Student 31, “The project with my most responsibility as ‘Production Manager’ is the first project. I have to do monthly figures including all expenditures and compare with revenue of the company.” |
|  | Student 7, “I had to know the problems in the cost reduction after we merge with the body shop, which I had no idea about it. It is very hard but I had to response in my duty as group so I started to discuss with my friends and find information in a library.” |
|  | Student 13, “each member in the team shares ideas extremely. This project also got high scores.” |
|  | Student 21, “This assignment made me aware that if I be the CEO of the company, the social responsibility will be a huge problem of my company….”my company will lose money in the future cause by global economy problem. So, I did not to concern about money that I will get, but I really care about my personnel and worker in my company. Because if I continue my company until my corporation is closed, imagine that how many people will lose their job, how many families will meet the trouble.” |
|  | Student 28, “I felt very real about the staffs strike situation because friends and the teacher made some noises like when staffs strike. I did hard work to find the best solution of the workers and the company.” |
|  | Student 9, “new market project of my company gave me a greatest sense of responsibility because this company belongs to me and this project was an important point to appoint the future of my company. the future of my company will depend on my decision. my subordinates (my friends) had to consult with me before they began their works.” |
|  | Student 17, “if we don’t have teamwork so our project can be not successful. My feeling of responsibility is I must be patient for the difficult work and some problem which can happen between works such as a problem with friend.” |
|  | Student 16, “the first project that really required everyone in the group to work together, so this work was so perfect!” |
|  | Student 19, “Luckily, I have a great team work in the group project. We have the organization and choose the topic that suitable for everyone. When we have the problem we will discuss and try to solve every problem for the best.” |
|  | Student 13, “I have learned about working with team in the whole course. I shared my ideas with my friends, get friends’ idea and accept each other. I have practiced it before I work at any companies.” |
|  | Student 30, “I’m really proud in our company teamwork. practice our experience to work in company anywhere in the future.” |
| Conclusions | Student 8, “Because the business world is changing every day, I have to know what it is changing now to develop the business. In this class, there are current events in business in real life and many events I have saw in the real life after I learned in the class. I can talk with my friend that I have learned for example I went to the Japanese restaurant and I saw its certificate about KPI, I told my friend I have learned about KPI in the afternoon. They did not know what KPI is, but I knew what is it and I can explain to them.” |
|  | Student 20, “I really proud that I can be the smart people for some friend who did not understand about the Banking because I learned in this subject but my friend did not learn before when we learned the impact of civilization which also teach this topic. So I can explain to my friend and my friend can got more knowledge.” |
|  | Student 13, “We gave an unity in our group and everyone are helped together. If someone who wasn’t finished in their work the remainder who is already finish will helping until the work is finish on time.” |
|  | Student 12, “if I meet the same current events in the business, I will try to suggest some people to do in the best way. All of these current events made me had a general knowledge about how to solve the problem that probably likely in the business and I believe that I will do it successful.” |
|  | Student 29, “a lot of dead and injured workers. I have to pay compensation to them for 3 months. I have to let other workers stop working because of air pollution around the factory. I have to care more about their health first. Furthermore, I have to manage the damage such as building, machines and equipment and estimate all of damage. I feel very tired and headache. Moreover, I have to wait for the insurance and they may pay half. That means I have to take company’s money to manage problems. I have to think, think and think about solution!! I feel it’s hard to solve problems and it’s difficult to be good CEO.” |

## Appendix B: Course Structure

The course consisted of 4 sections, each developing basic business concepts in which English Major students could then express solutions in their own words.

### Company Creation

Students group themselves into a company of CEO / Secretary / Prod/Sales Manager / HR Manager. They choose a name, a product, and complete a simple calculation sheet for salaries, office and factory costs, production costs, and sales through distributors. Their first simulation from this Excel file (Monthly Figures sheet) is to consider the countries and cities where they will operate. They must choose 5 locations and include the name of the relevant Thai ambassador. Groups then present a report, outlining their project, minutes of meetings that explain their decision-making process, and business calculations.

### Company Governance

Students designated as CEO or Production Sales manager) learn that one of their factories has exploded and need to handle the environmental and human collateral (Crisis Month sheet). They explain themselves in front of a Press Conference. Students (Secretary / HR Mgr) also learn that workers are demanding a pay-rise in line with inflation (Salary Rise Demand) and present their wage offer to a Union Meeting of very unfriendly workers

(the rest of the class demanding 25%).

### Company Financing

Students study the history of banking in Thailand, fractional reserve, the establishment of company-run banks, the current top 15 (largely family-run) banks, and work with a calculation sheet for determining which provinces in Thailand the student's own company-bank would most likely gain the largest market share of the population. Figures are taken from recent bank figures.

This is developed in a separate Excel file (Running a Bank.xlsx)

### Company Growth

Students are faced with a takeover bid from a global company. The CEO will loose his position (with a golden parachute) and the company must consider the impacts of Market Share Expansion, Cost Reduction, Social and Cultural Integration, and Financial Savings. Then they will advise the Board of Directors and shareholders (the rest of the class) whether we should accept the M&A. (see Merger & Acquisition sheet and Risk Assessment sheet). They produce a Balanced Scorecard and present their findings to a shareholders meeting.

## Appendix C: Student List

| **Student** | **Company** | **Position** | **Gender** | **Age** | **Nickname** |
| --- | --- | --- | --- | --- | --- |
| Student 1 | AB2P | CEO | female | 22 | Pla |
| Student 2 | AB2P | HR Mgr | female | 22 | Bua |
| Student 3 | AB2P | Prod.Mgr | female | 22 | Amp |
| Student 4 | AB2P | Secretary | female | 22 | Pui |
| Student 5 | ALC | CEO | male | 22 | Puttz |
| Student 6 | ALC | HR Mgr | female | 22 | Aom |
| Student 7 | ALC | Prod.Mgr | male | 22 | M |
| Student 8 | ALC | Secretary | female | 22 | Kang |
| Student 9 | Delight | CEO | male | 22 | Tua |
| Student 10 | Delight | HR Mgr | male | 22 | Pao |
| Student 11 | Delight | Prod.Mgr | male | 22 | Ron |
| Student 12 | Delight | Secretary | female | 22 | Bow |
| Student 13 | HerbalHouse | CEO | female | 22 | Bell |
| Student14 | HerbalHouse | HR Mgr | female | 22 | Nita |
| Student 15 | HerbalHouse | Prod.Mgr | female | 22 | New |
| Student 16 | HerbalHouse | Secretary | male | 22 | Top |
| Student17 | HerbPads | CEO | female | 22 | Tar |
| Student 18 | HerbPads | HR Mgr | female | 22 | Nan |
| Student 19 | HerbPads | Prod.Mgr | female | 22 | Joy |
| Student 20 | HerbPads | Secretary | female | 22 | Ying |
| Student 21 | K3N | CEO | female | 22 | Nuy |
| Student 22 | K3N | HR Mgr | female | 22 | New |
| Student 23 | K3N | Prod.Mgr | female | 22 | Nita |
| Student 24 | K3N | Secretary | female | 22 | Kloy-Jai |
| Student 25 | Lollipop | CEO | female | 22 | Fai |
| Student 26 | Lollipop | HR Mgr | male | 22 | Namo |
| Student 27 | Lollipop | Prod.Mgr | male | 22 | Book |
| Student 28 | Lollipop | Secretary | female | 22 | Noi |
| Student 29 | Reel | CEO | female | 22 | Drac |
| Student 30 | Reel | HR Mgr | female | 22 | Ouy |
| Student 31 | Reel | Prod.Mgr | female | 22 | Muai |
| Student 32 | Reel | Secretary | female | 22 | Kaew |