# Mediation Game When the Conflict Can Be Fun to Learn—A Legal Skill Learning Tool: The Integration of Knowledge Management, Learning Theory and Serious Game Concept

Chainarong Luengvilai<sup>1</sup> & Pitipong Yodmongkol<sup>1</sup>

Correspondence: Chainarong Luengvilai, College of Arts, Media and Technology, Chiang Mai University, 239 Huaykaew Rd., Suthep, Muang, Chiang Mai 50200. Tel: 66-53-920-299. E-mail: chainarong.l@cmu.ac.th

Received: October 15, 2015 Accepted: November 25, 2015 Online Published: April 26, 2016

#### Abstract

Legal justice in Thailand has been shifted to restorative justice for reasons. But Thai law schools have not been changed to promote lawyering skill learning opportunities due to various obstacles and limitations caused by existing legal educational policies, law curriculum's structure, knowledgeable instructors, and learners' characteristics. As a result, most graduate law students have been faced with difficulties as regards not only their mediation skill capacity but also other legal skills. To solve the problem beyond the single loop learning, the study proposed the integration of knowledge management approaches, an appropriate learning theory, and serious game concept to initiate an alternative learning tool to enhance mediation skill learning. The study demonstrated the two crucial stages of game designing and experimentation to verify the potentiality of games in enhancing the knowledge and learning engagement. The outcome of such game designing and experimentation can provided both a satisfied interactive learning tool and a linkage for the flow of advocacy skills knowledge from the community of experts to law students who, sooner or later, will be their competent team workers.

Keywords: legal education, mediation skill, knowledge management, serious game

# 1. Introduction

# 1.1 Newly Shifted Paradigm from Legal Justice to Social Justice in Thailand

At present, the Thai legal justice has been shifting its paradigm from the zero-sum concept to amicable solutions in order to enhance social justice and happiness. Due to the fact that the court of justice of Thailand has long been facing exceeding numbers of legal cases being submitted to the nation over many years (Thailand. Statistics division, 2009), the adversary system, which is the major conflict resolution that people apply to justify fairness, has a zero-sum game concept with one side winning and the other side losing, eventually. Thus, all parties, including the representative lawyers, stand to suffer the burden of the case's spin-off, for instance, time being consumed for years, loss of litigation fee and work, having to live with the stress, and, even, a breakdown in the parties' relationship (Seligman, Verkuil, & Kang, 2005). As a consequence, the justice authorities of Thailand critically considered restorative justice concept as an alternative dispute resolution to solve the conflicts with effective outcome and maintain justice to every party. The restorative justice concept has been widely accepted in the written structures and procedures of new laws. For instance; the Ministry of Justice promulgated the two ministerial regulations which are, firstly, the civil cases meditation, B.E. 2553 (2010), and, lastly, the criminal cases mediation, B.E. 2553 (2010), according to the Thai cabinet approval (Thailand-Cabinet, August 18, B.E. 2552 (2009)). The courts of first sentence had established the alternative dispute resolution office (ADR office) all over the country in order to solve people's conflicts before the conflicts go through court trials. Consequently, the number of pending cases has decreased since the following year of B.E. 2553 (2010) (Thailand Statistics Division, 2010, 2013).

Although lawyers shall have the potential to be the mediators due to their legal knowledge, conflict solving experiences, and effective communication skills, not every lawyer can perform successful mediation (Kanthong, December 3, 2012; Tubwong, November 29, 2012). The reason is that most of untrained (or inexperienced) mediating lawyers tend to apply the win-lose strategy, rather than to utilize the win-win approach. This is perceived to be risky to the effectiveness of the mediation process (Sathirathai, Febuary 8, 2013;

<sup>&</sup>lt;sup>1</sup> College of Arts, Media and Technology, Chiang Mai University, Chiang Mai, Thailand

Thammasat-University-Research-and-Consultantcy-Institute, 2010). Moreover, litigation lawyers have to, on a prior basis, tune their mindset and faith to the fact that an interest-based reconciliation approach of mediation alternatively provides social justice with happiness to people rather than a litigating resolution (Vatanasapt, August 29, 2012). Otherwise, because of the ignorance of lawyers regarding such confrontation, the lawyer's role as a legal dispute solver will sooner or later be replaced by eligible trained mediators from other career paths (Kanthong, 2012).

# 1.2 The Challenge of Thai Law Schools to Prepare Lawyer Mediators

Thai law schools, as the primary institution for developing competent lawyers, should support the new legal justice paradigm by encouraging mediation learning in all law students as appropriate to their generation, life experiences.

However, some major obstacles Thai law schools have encountered, which can make the process of promoting mediation learning far more time-consuming and inconsistent, are as follows:

# 1.2.1 Legal Content-Oriented Curriculum and Unclear National Legal Education Policy

The undergraduate law program and the Thai Bar certificate program are both legal-content oriented which aim at understanding, interpreting, and applying all the core substantive laws. There are very few lawyering skill courses and most of these are elective courses with limited number of seats per class. Therefore, Thai law schools usually have a lack of lawyering skills knowledge and learning opportunities. As a result, a previous study had discussed the dissatisfaction level as regards fundamental lawyering skills capacity of newly minted Thai graduate law students (Luengvilai & Yodmongkol, 2011). Moreover, additional compulsory course for legal skill courses may have an impact on curriculum revision due to the existing total course credits generally are already high (approximately 140 credits for a four-year curriculum). Lastly, ideas regarding lawyering skills based learning have just recently been introduced by the Thai Legal Education Reform Committee, but the vision and the application remain undecided (Law-Reform-Commission-of-Thailand, 2011).

# 1.2.2 Lack of Experienced Mediators in Law Schools

As a result of the legal content-oriented curriculum as mentioned above, Thai law schools prefer law professors with solid legal academic to legal practicing experiences background. Moreover, transferring legal skill knowledge is required something more attractive than lecturing method which is considered to be of lower efficiency in terms of learning outcome when compared with other interactive learning approaches (Barbazette, 2006). There are evidences that most Thai law schools arrange legal skill courses by inviting external legal experts as guest lecturers or co-teaching program.

# 1.2.3 Limitation of External Legal Experts

Noticeably, practicing lawyers normally have a set of knowledge comprising valuable explicit and tacit knowledge derived from work experiences. This is evidenced from the fact that some inexperienced law lecturers are inappropriately assigned to take care of lawyering skill courses. Many law schools in western countries consequently resort to inviting professional practicing lawyers under "Co-teaching program" to teach lawyering skills courses (Wegner, 2009). However, there are some necessary obstacles to be solved. Not all legal practitioners can give timely and constructive feedbacks due to time constraint in their law practices or businesses. Furthermore, recruiting local competent lawyers may not be possible in some areas where law schools are located. Some law schools have lacking of legal expertise networking capacity. Additionally, if some law schools have to invite legal experts from other locations, budget per course would be higher than it is.

# 1.2.4 Limitation of Legal Skill Knowledge Transferring for Mass Learning Situation

The problem currently is undergraduate law programs in Thailand normally accept hundreds of young law students (18-19 years old), who have just graduated from high schools, per academic year: for instance, approximately 200-600 law students at governmental law schools (Faculty-of-Law-Chiang-Mai-University, 2014; Faculty-of-Law-Chularongkorn-University, 2012; Faculty-of-Law-Thammasat-University, 2011). And more than thousand students at open public universities—mainly Ramkhamhaeng University and Sukhothai Thammathirat Open University. Definitely, legal experts as guest lectures or co-teachers have no sufficient time and effort to take care such mass learners.

To conclude, if legal educators believe that lawyering skills would be systematically imparted to all law students before graduation, teaching approaches, learning styles, and management strategy should be appropriately changed to serve best interest of the law students. Therefore, the paper proposed an alternative legal skill learning method for delivering the mediation knowledge as appropriate to hundreds of young law students and

by taking into consideration the limitations in learning of law schools as much as possible.

#### 1.3 International Trends

Law schools from leading universities around the world have been changing their legal content and doctrine oriented curriculum to a curriculum based on lawyering skills. This has been exemplified in Japan, where dissatisfaction with the abstract nature of legal education resulted in major efforts to introduce American-style skills-based courses into graduate levels of legal education. In the same study, Taiwan and South Korea were shown to have concerns about an excessive emphasis on theory and not enough attention to practical skills training (Irish, 2006; Lee, 2009). Approaches to lawyering skills have been introduced and shared at official conferences or symposiums (Wegner, 2009). For example, in 1992 the American Bar Association presented a report suggesting that lawyering skills can be learnt in the classroom and from legal clinics through case based learning (American-Bar-Association, 1992; Clark, 1993; Fine, 2009). Some universities are using such courses to teach substantive law and professional skills via special techniques, for example, a course in contract law can also be a vehicle for project based learning or legal writing exercises (Irish, 2006). It has been strongly suggested that lawyering skills can be learnt by internship activities or through working experiences outside law school (Givelber, Baker, McDevitt, & Miliano, March 1995). Some introduced simulations to enhance student learning of substantive law, professional skills and personal development (Ferber, 2002). Law schools in some instances implemented a comprehensive lawyering curriculum to enhance law students' ability (Thompson, 2009), or have utilized the CaseArc integrated lawyering skills program(Case-Western-Reserve-University-School-of-Law, 2011). These approaches or techniques have been implemented into the law curriculum of leading law schools from many countries. The effectiveness of these approaches is still being discussed. Although the methods applied in intensive legal skill learning are worth the effort, they may not suitable for a huge mass (or a large-scale) of learning management system in the Thai law schools since they can cause a time-consuming process and can carry the main burden of class management.

# 1.4 Conceptual Ideas of Mediation game

Firstly, Thai law schools have to think out of the box or beyond the single loop of solution to overcome these obstacles instead of attempting to management all obstacles. If what the schools do really need is the tacit or explicit legal skill knowledge from legal experts, then law schools should capture and utilize complicated mediation skill knowledge from qualified experienced mediators. Then they should comprehensibly rearrange it under a learning theory before transferring it to law students. Revised versions of the knowledge in cooperation with legal experts can be repeatedly made for a certain period of time. This solution is friendly for busy lawyers and local law schools can control the budget. In summary, author believes knowledge management would be a helpful solution to address the problems. Legal knowledge management can greatly enhance the law students' ability to access tacit lawyering skill knowledge.

Secondly, law students generally are young and having improper maturity to take care real client cases, consequently they are limited to learn legal skill learning opportunity. Therefore, they often are required as possible opportunities by law schools to exercise their critical thinking: reasonable and reflective thinking, in various simulating situations before making any judgments or legal actions related to legal arguments or legal cases. To achieve such critical thinking tasks, they sometimes have to retrieve particular knowledge from their remembering. Sometimes they have to apply particular knowledge before the critical ideas shall be introduced in class.

It demonstrated that the higher order of thinking, so called "Bloom's Taxonomy", which originated during the sixth decades of twenty century (1950-1959) by Professor Benjamin Bloom is the ground factor for effective critical thinking (Friedland, 1996). The Bloom's Taxonomy is a list of six educational objectives including—based on level of complexity of thinking—knowledge, comprehension, application, analysis, synthesis, and evaluation. Later on in 1990-1999, David R. Krathwohl, Professor of Education Emeritus at Syracuse University, proposed a revision of Bloom's Taxonomy with main two changes: restructuring learning objectives but remained number of categories; and some category names were changed to verb form in order to be appropriate for their learning objectives as shown in the following Table 1 (Krathwohl, 2002). Because the revised Bloom's Taxonomy aims at developing the student's learning behavior according to six order categories; for instance, students will be able to remember: recall previously learned information, analyze: separate material or concepts into component parts so that its organizational structure may be understood or distinguishes between facts and inferences, evaluate: make judgments based on criteria and standards through checking and criticizing, and create: put the elements together to form a coherent or functional whole, reorganize elements into a new pattern or structure through generating, planning or producing (Krathwohl, 2002). For this reason, utilizing learning objectives of the revised Bloom's

Taxonomy as a framework in the design of learning process and law student's performance evaluation of each fundamental lawyering skill would be appropriate and suitable for young law students.

Table 1. The Original and revised version of Bloom's taxonomy

Categories	Original Taxonomy	Revised Taxonomy	
1	Knowledge	Remember	
2	Comprehension	Understand	
3	Application	Apply	
4	Analysis	Analyze	
5	Synthesis	Evaluate	
6	Evaluation	Create	

Finally, serious game may be an appropriate choice for fundamental lawyering skill learning and enhancing learning opportunity for large classrooms like law schools in Thailand. Serious game can be defined as an interactive learning approach that has a challenging goal, is fun to play. It is engaging, and incorporates some concept of scoring. Additionally, serious game imparts to the user a skill, knowledge, or attitude that can be applied to the real world (Collins, Kanev, & Kapralos, 2010). Serious game can provide both learning by doing opportunity which is recommended for fundamental lawyering skill learning by legal education developers (Bock et al., 2009; Sonsteng, Cicero, Gilats, Haydock, & McLachlan, 1995); and a wide variety of challenging simulations or case studies or scenarios for effective skill learning just like flight simulators for pilots in the airline industry (Barbazette, 2006). For lawyering skill practice, the challenge of serious game allows law students to learn from their mistakes without jeopardizing real legal client's interests. In brief, serious game is suitable for self-learning, high accessibility, repeatable learning, timely feedback, and mass audiences. Furthermore, there is potential to apply the idea of serious game as an alternative solution with high accessibility and mass participation to meet the needs of a new generation of law students, and overcome the existing obstacles in learning lawyering skills at the faculties of law in Thailand.

To sum up, based on characteristics of law students and learning environment within the law schools, the authors therefore propose the "Mediation Game", particularly designed from the integration of knowledge management, to capture and utilize skill knowledge from legal experts. The authors adopt the revised Bloom's taxonomy-cognitive learning theory as a framework for learning objectives and finally introduce *serious game* as a potential interactive learning tool to serve a large-scale of law students of the twenty-first century.

#### 1.5 Hypothesis

Mediation game which designed from the integration of the knowledge management ideas, learning theory and serious game concept can initiate a satisfied mediation skill learning tool for volunteer law students.

#### 2. Methodology

The ultimate goal of the research is to initiate an alternative learning tool for mediation skill in Thai law schools which encourage interactive learning and enhancing learning engagement for mass law students of twenty-fist century. By taking into consideration the said purposes under the restricted-for-various-reasons circumstances in Thai law schools, the research divided in two stages as described.

# 2.1 Mediation Game Design

The conceptual mediation game design which integration of the knowledge capturing approach to structure the qualified mediation skill knowledge, learning theory to initiate questions for learning during the game and serious game concept to create game challenging and learning engagement with fun, as demonstrated in Figure 1, with details.



Figure 1. The board game design and other components of the mediation game

# 2.1.1 Knowledge Acquisition

To ensure that the study can generate the qualified tacit and explicit mediating knowledge, the authors applied knowledge capturing method as guided by the knowledge management concepts. The methodology was defined as having two crucial parts, as follows:

## A. Identification of Thai expert mediators.

Thailand as a study area does not have any official list of mediation experts. Identifying eligible experts by researchers would be too time-consuming and would give rise to room for being accused of bias. Therefore, the study applied an in-depth interview approach for identifying appropriate experienced mediators from the practicing leaders that have major law career paths. There were, firstly, the president of the law society of the Lawyers' Council of Thailand, the general attorney at law of Thailand, and well-known lawyers who have strong legal academic background as well as practicing background in Thailand. The said approach applied the snowball sampling concept, or referral sampling, which is the recruitment method that employs research into participants' social networks to identify and access hard-to-reach populations, for instance, sensitive persons, reclusive persons, or hard-to-identify persons (Browne, 2005; Goodman, 1961; Kaplan, Korf, & Sterk, 1987; Sadler, Lee, Lim, & Fullerton, 2010). Eventually, nine mediators of the required expertise were identified, as shown in Appendix.

# B. Knowledge capturing.

The study applied an unstructured interview with open-ended questions to encourage the nine expert mediators to freely describe what they do in their mediating instances and how they proceed with their mediating experiences. The list of the names of the interviewees is given in Appendix I. Additionally, the experts recommended the use of books that give explicit knowledge on conflict management which they have been using as well. Afterward, all the responses in the form of tacit and explicit knowledge were transcribed and structured toward principles, processes, techniques, etc. of mediation skills.

#### 2.1.2 Game Strategy

As the serious game components are rules, players' strategies or constraints, random scenarios and scoring. Then, the game applied the "Quick-Quiz and Rally-Point Scoring Concept" to impart mediation knowledge to all the players, which was fun to play. The fun factor is generated because the quick-quiz model stimulates the players to focus on questions and answer them within a given time limit. In addition, the rally-point scoring allows, depending on the rules, one or more players to gain scores from a dice roll for every single question. It moves the game forward at all times until the first player has completely arrived at an "amicable solution block" on the board game.

# 2.1.3 Designing of Questions

# A. Structure of questions.

All the questions were initiatively transformed from the knowledge shared by the Thai experienced mediators at the earlier stage into two sets of questions, called "SET A" and "SET B." Set A is all about basic understanding of conflict and mediation. Set B goes deeper into the process, techniques, and application of mediation in various situations. Each question was a mix of the six taxonomy educational objectives under cognitive learning of the Bloom Taxonomy Revised Version with multiple choices and open-ended style of questions. The questions were designed to encourage and challenge the players to demonstrate their memory power, understanding power, application skills, analysis abilities, evaluation skills, and creativity as regards the principles, processes, techniques, etc. of mediation(Anderson, Krathwohl, & Bloom, 2001; Krathwohl, 2002).

# B. Question card design

As the mediation game aims at enhancing interactive learning, the question card design must provide sufficient related knowledge and information, also in addition to being friendly to other functions and concepts of the game. To that end, each question card was designed to be of three parts but with the details of the three parts different in terms of the types of questions, as presented in Figure 2 and Figure 3.

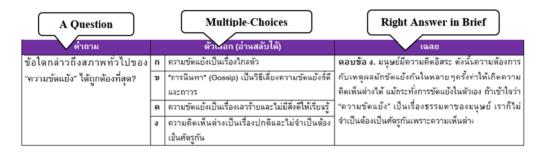


Figure 2. The sample of a multiple-choice question card in Thai language



Figure 3. The sample of an open-ended question card in Thai language

# C. Application of questions

Apart from the quick-quiz concept, all questions are non-repeatable during a game time. This is to ensure that the players learn and experience the knowledge provided in each question as much as possible. Additionally, because the questions are basically meant to help the players acquire knowledge about mediation, their design should have linkage in terms of supporting the players' communication during the game as well. Further details will be discussed later in the communication design.

#### 2.1.4 Board Game Design

A round or a circular shape was selected as the conceptual design, as demonstrated in Figure 4. This was because the experts were of the opinion that the circular shape encourages the parties in conflict to experience a feeling of

equality when sitting around a circular table. Some blocks on the board game are for rewarding or obstructing the players with particular conditions which are mostly linked to some situation in mediation to familiarize the players with mediation knowledge. For instance, a block said: "Parties in conflict failed to initiate common rules for peaceful mediation; thus, the player who stops on the block must step back four blocks."

## 2.1.5 Game Challenging Design

Game challenging aims at promoting the linkage of players' engagement and learning opportunity. The authors believe that the more the players' engagement, the more the players will acquire mediation knowledge. Hence, any aspects that promote the appropriate complexion, unpredictable situations, game dynamics, players' attention, and the addition of fun to the game are the basic ideas of this challenging design. The challenging aspects of the mediation game are as follows:

# A. Randomized questions

As the questions are divided into two sets, Set A and Set B, each player can strategize his or her game by freely drawing a question from any question set as he or she prefers. But the challenging aspect is that no one would know, not even the selector, what the question is about because the questions are mixed as regards simple and complex, and enclosed in an envelope. This is what makes the situation unpredictable and the game, exciting.

# B. Rewards and barriers

There are many advantageous and disadvantageous conditions provided on particular blocks throughout the board game. For any player who temporarily stops at such blocks is rewarded with or obstructed by conditions, which makes the game have unpredictable situations and, sometimes, turn into fun.

## C. An open-ended question strategy

This question encourages the respondent to freely demonstrate his or her knowledge without any guidelines. It is good to let them speak out the answer from their understanding. Thereafter, the questioner shares the brief answer as suggested on the question card. At this stage, the players may open discussions with each other regarding clear and correct answers before moving the game forward. The hidden purpose for the open-ended questions is to encourage more discussion between both players that will lead to a more controversial and debatable arguments. This will, therefore, provide more opportunity for them to learn how to solve the conflict, otherwise the game will come to an end with no concrete action.

# D. Bargaining cards

Bargaining cards apply bargaining power situations which normally obstruct the progress of mediation in real. The conditions as stated in each bargaining card affect the players in the answering questions part or in moving forward on the board game. According to the rules of the game, the players can freely utilize its conditions to benefit themselves or to obstruct other parties and vice versa. This challenging hopefully gain dynamics and chances, and add fun to the game. The Table 2 showed samples of the bargaining cards in the mediation game.

Table 2. Samples of Bargaining Cards

Bargaining cards for quick-quiz part						
+ 5 Second	- 15 Second	Pass&Score	Cut 1 Choice	Blind Choices	New Q-Card	
Bargaining cards for game strategies						
+1 Point	+3 Points	+4 Points	-1 Point	-2 Points	-4 Points	

## A. Dice Roll

It is generally known as a matter of chance that players apply themselves with the intention of moving their game forward. Definitely, games are about luck as regards draw, and are fun.

#### B. Time limit

Answering time is basically 40 seconds per question. This urges the players to focus on completing the answers within the time constraint. At this challenge, each player can have fun by utilizing the bargaining cards "+" or "-" seconds for extra time for self or to deduct other parties' time.

#### C. Reconciliation card

The card contains ideas for alternative solutions as suggested by the expert mediators. The players can utilize the card if they cannot solve their conflicts regarding consensus on the correct answer which may have become necessary in an open-ended question, as stated earlier. Moreover, once the card is applied, regardless of whether their conflict was solved or not, the players eventually learn something about how the mediator finds alternative amicable solutions. Therefore, the card aims at challenging the players to try and learn the application of procedures to generate alternative solutions in their conflicts during a game time.

#### 2.1.6 Players' Communication Design

Communication between the players is another concern as it is important to keep the players communicating with each other at all times and, thus, makes the game lively. Thus, only the questioner is forced by rules to read out aloud a question, the multiple choices (if any), and a brief answer as provided in the question card (Q Card). This approach ensures that the respondent player has to carefully listen to what the questioner said in order to answer the question on time. Note-taking for best understanding the question and giving the perfect answer is allowed. Furthermore, an open-ended question can increase communication because it is not only that the responding player has to answer the question in his or her own words, but he or she may also sometimes have to be engaged in a discussion for a clearer answer. To support the communication design, each question card was divided into three parts, as shown in Figure 2 for the multiple-choice questions and Figure 3 for the open-ended questions.

#### 2.2 Experimental Stage

Although games generally draw players' attention because of their fun factor, the mediation game is a serious game that aims at encouraging law students to learn by themselves the complex mediation knowledge as much as possible. Therefore, the authors' objective is not just to understand how far the game can provide interactive learning as regards mediation skills but to ensure the learner's engagement during the game as well. Learning engagement refers to the ability to encourage attention, curiosity, interest, optimism, and passion of the learners when they are learning (Great-Schools-Partnership.org, 2015). Educators believe that learning engagement can bring about a better understanding of what the students are learning because it draws the learners' motivation to the fact that they have to learn and finally link the same to the progression in their education (Kahu, 2013; P. Trowler & V. Trowler, 2010; Zepke & Leach, 2010). For that reason, the purposes and methodology of the experimental procedure were as follows:

## 2.2.1 Purposes

The study aims at discovering the effectiveness of the mediation game toward the following purposes:

- 1) To verify how the mediation game provides mediation knowledge to volunteer law students.
- 2) To verify how the mediation game provides learning engagement to volunteer law students.

# 2.2.2 Expected output

- 1) The volunteer law students should have higher mediation skill knowledge after learning the skills through the mediation game.
- 2) The mediation game is supposed to initiate various learning engagement characteristics to enhance the learning environment.

## 2.2.3 Research Area

The study aims at enhancing mediation skills, one of the fundamental lawyering skills, in law students in Thailand; senior law students of Chiang Mai University, Thailand, were considered as samples in the study. Their life experiences are extremely similar to those of novice lawyers, and they have the potential ability to understand the complexity of mediation knowledge. Furthermore, the study applied a voluntary sample approach to recruit senior law students as samples, and so, the number of the sample may not represent the population principle. Additionally, they were expected to complete multiple tasks during the study, tasks that included pre-test tasks, post-test tasks, interviewing, playing the mediation game for two times, and online survey.

# 2.2.4 Methodology

# A. Interviewing

This is to identify the gap between their self-evaluation and the actual knowledge derived from the test's results toward mediation skill literacy. The gap analysis would help authors have a better understanding of the volunteers' background. The key questions were categorized into three parts, as follows:

- 1) Conflict management experience and awareness
- a) Have you ever been involved in a serious conflict with anyone?
- b) What was the conflict all about?
- c) How was the conflict solved?
- d) Did the conflict end happily, or not?
- e) What did you learn from such a conflict?
- 2) Expectation toward the mediation game
- a) What are your expectations from the mediation game?
- B. Pre-test and post-test analyses
- 1) The tests were totally of 65 questions from 50 multiple-choice questions and 15 open-ended questions.
- 2) All the questions covered fundamental issues of mediation skill which were selected from the questions provided in the game.
- 3) Pre-conditions for the post-test: all the volunteer law students were instructed to play the game for two times due to the fact that the learners might be swayed from the game's content by the complex rules at the first play. Moreover, the arrangement was such that they played a game for only one time per day.
- 4) All the samples were guided to complete the post-test by, at least, the next two day after finishing the mediation games. This was to prevent short memories of players swayed the post-test learning scores analysis.
- All the samples were first arranged to complete the interviewing part, the open-ended questions, and the multiple-choice questions, in that order. This was to ensure that their responses in the interviewing part or the open-ended questions part would not be biased by absorbing some content in the multiple-choice questions part. Note that their responses in the post-test might be biased by the experiences from the pre-test anyway. But the post-test was intervened by two times of playing the mediation games. So, the post-test was delayed to be completed at least 4 days after the pre-test. In any case, none of the volunteers knew the right answers of both the pre-test and the post-test analyses, except at the time when the game was on

## C. Observation

Video recording was applied during the games for learning engagement analysis. Moreover, all the volunteer law students were encouraged to record the usage time periods, and the numbers and types of questions for each game for the learning engagement analysis.

# D. Online survey

All the volunteer law students were required to respond to a quick survey online, after the post-test completion, which included the following issues:

Opinions toward satisfaction of game design and learning engagement of players' behaviours.

- a) What do you like the most in the mediation game? Why?
- b) What do you dislike the most in the mediation game? Why?
- c) What does the mediation game do?
- d) Have you ever discussed the right and clear answers during the games? If yes, can you demonstrate its frequency, from one to ten times or more?
- e) Have you ever done any note-taking during the game? Why?
- f) Have you ever applied the "Reconciliation Card" during the games? If yes, how often? Why?

## 3. Results

Based on the two purposes of the study as described in 2.2.1, the results were as follows:

## 3.1 General Results

The study welcomed, at first, nineteen voluntary senior law students, but finally two of the sample students resigned from the study after the first interviewing task for personal reasons. The remaining seventeen voluntary samples were referred throughout the study by random selection by themselves as the "V code plus number,"

from 1 to 50, for instance, V1, V7, etc. They were informed about the study purposes and the methodology using both written papers and personal briefing before processing any of the tasks. The personal interviewing prior mediation game experimental shown that all samples had confronted the conflicts and concerned the negative impact of the conflict in various levels. They generally applied win-lose approaches to solve their conflicts. Only few tried to compromise but lack of mediation skill knowledge to understand each other conflict parties or initiate positive communication until discovering together amicable solutions.

# 3.2 Effectiveness of the Mediation Game as a Learning Tool

The mediation game was designed to encourage law students to interactively learn beyond the classroom as to what the experienced mediators do and don't do in the mediation. Students as samples, presumably, have better mediation knowledge after playing the game. Then, its effectiveness should be demonstrated by the development analysis of the pre-test and post-test scores. All the samples had completed both the pre-test and the post-test analyses within one hour for each. Each of the tests had a total of 125 points from the multiple-choice test (50 points) and the essay test (75 points). These were results and analyses of scores gained in the pre-test and the post-test. When examining the pre-test for all the samples (N=17), it was determined that the scores ranged from 48 points to 85 points. Three of them, V9; V42 and V50, had gained almost double scores when compared to the pre-test.

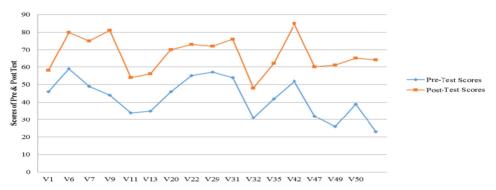


Figure 4. The pre-test and post-test scores analysis of samples toward mediation learning via games

When comparing the pre-test and the post-test scores for all the samples (N=17), the average pre-test score was found to be 42.59 points and the average post-test score was observed as 67.06 points, yielding a % that is statistically significant. When a correlation was performed, the pre-test and post-test scores measured the same concepts. Further, the results of a T-test yielded significance at the .000 level (p<.000\*), meaning that for the samples, the difference between the pre-test average score and the post-test average score was statistically significant, as presented in Table 3.

Table 3. Pre-test and post-test analyses by paired sample t-test of mediation learning via game

			Paired Differences						
	-	Mean	Std. Deviation			95% Confidence Interval of the Difference		df	Sig. (2-tailed)
			Deviation	Wican	Lower	Upper			
Pair 1	Pre-test scores Post-test scores	-2.44706E1	8.07866	1.95936	-28.62425	-20.31693	-12.489	16	.000*

Additional results were also found satisfactory cognitive learning development when analyzed the pre-test and post-test scores under the Bloom Taxonomy dimension. As each question was categorized in accordance with thinking order of the Bloom Taxonomy to test players' remembering, understanding, applying, analyzing,

evaluating and creating toward mediation skill knowledge. The analysis shown the post-test has significant higher scores percentage at various range than the pre-test at all type of questions. For instance, nine from eleven questions of understanding type had post-test scores higher than pre-test when compared questions by question. Twelve from seventeen questions of analyzing type gained higher the post-test correct answers than the pre-test. Interestingly, the post-test scores of four creating questions had completely increased. However, some questions in particular question types, understanding; analyzing and applying, failed to gain higher post-test scores than the pre-test due to some the those questions were multiple right answers type like question No.24,26,44. It means that samples may not gained scores unless they selected all right answers correctively or respectively.

# 3.3 Mediation Game and Learning Engagement Effectiveness

Several pieces of evidence from the experiments show the characteristics of learning engagement, as described.

# 3.3.1 Time Usage per Game

According to the seventeen playing-time records of the mediation game, the records shown an interesting amount of time spent in each game. The first game times were, on an average, longer than those of the second round. This is because part of the time was spent on discussing the rules of the game which were not familiar to the samples. The average time spent per game was one hour and seventeen minutes. This indicates that the mediation game can encourage law students to strictly attend to an interactive learning session which is close to a current regular class period, that is, one hour and thirty minutes, as applied in the Chiang Mai University.

Table 4. Significant time usage in mediation games

Game period	Minimum time	Maximum time	Average time	Overall average	
First round	59 minutes	2 hours	1 hour and 27 minutes	1 hour and 15 minutes	
Second round 47 minutes 11		1 hour and 22 minutes	1 hour and 6 minutes	1 nour and 13 minutes	

# 3.3.2 Question Usage per Game

According to the rules of the game, it was required that the players provide each other a self-education by reading out loud every right answer written in the question cards. Then, it would be that the more the questions challenge the players in the game, the wider the mediation knowledge shared with all the players. Although the number of questions used for all games is not distinctively different between the first and the second play times, as described in Table 5, the average number is almost one-third of the total number of questions introduced in the mediation game. Noticeably, the authors found that question usages are still about the same number, while the time spent for the game was found to have decreased, as demonstrated in Table 4 and Table 5. There is substantial evidence to believe that the number of questions has a tendency to increase once the players are familiar with the game rules and protocols. Therefore, it can be concluded that the game concept design has potentially brought about a significant amount of question usage, as shown, and also reflects the learning engagement opportunity.

Table 5. Significant amount of question usage in mediation game

Question usage	Minimum	Maximum	Average question usage
First round	18 questions	28 questions	23-24 questions
Second round	17 questions	31 questions	23-24 questions

# 3.4 Learning Behaviors

As part of the games observation by video recording, various desirable learning engagement characteristics in all the sample behaviors or reactions were observed. For instance.

## 3.4.1 Learning Engagement Behaviors

As stated by the observation, all the samples were found to pay attention and carefully listen to what the other players said throughout the game as regards the details of questions, multiple choices, and, even, the brief right answers. Moreover, more than ninety percentages of the samples were observed to apply taking down of short notes for perfect answers, according to the online survey. The survey said that these positive behaviors of the

samples were exactly what were expected of players' behaviors according to the intentions of the game's design. Allowing the players to perform self-reading of all the questions before answering may encourage attention to the respondents, but this would impact less communication and lead to the game being lively. Because some samples tried to make funny sounds and playfully do some acting when reading the questions, the game became more fun as well.

# 3.4.2 Fun to Play and Learn

As a result of all the challenging tasks that were designed for the game, all the samples expressed various joyful behaviors during the game than just being merely friendly with each other. This enhanced and prolonged their focus on the game with fun. For instance, apart from being just friendly, the players felt encouraged to joyfully bluff each other during the game; they also readily applied the bargaining cards to delay the other parties or to put oneself in an advantageous position in the games. This made the game have situations of uncertainty, leading to fun. Apart from this experimental study, the mediation game was once, as the invitation of Professor Vanchai Vatanasapt-Thai expert mediator, trialed with eight nurses who had just recently attended the mediation seminar held by the National Health Security Office, Thailand. The seminar aimed at empowering their staffs by teaching them how to mediate conflicts, thus ameliorating the health care system. They were divided in four persons per a team. The authors found that multi-players encourage lively team's discussion and participation before introduce any consensus answers. Multiple players approach is possible in this game and it also demonstrated more lively learning engagement. Moreover, the authors observed that the game had more effective learning engagement in the case of those players than the voluntary law students. This is because they were all basically interested in mediation skills and the mediation game was applied for them as a knowledge refreshment tool. This indicates that the mediation game is proper suited as learning engagement for learners who are basically interested in mediation skills.

#### 4. Discussion

Although the mediation game could not either encourage real-life mediation practicing or replace a live classroom learning with professors or experts, it is an alternative pedagogical assistance approach which is advantageous and suitable for learners' life experiences. This is because the game has been proved by the study as encouraging cognitive learning which provides a good mindset of mediation knowledge for law students in their future legal work. The interactive game itself is also a breakthrough while considering the limits of the classroom with high learning accessibility, and eliminates the limitations of cost and class management of law schools as well. This is possible because the game has the potential for self-transferring mediation knowledge from the experts to law students without classroom. This means that the game filled the gap between legal profession and legal academic by supporting the knowledge flow from the community of practice to new learners who, sooner or later, will work with the experts. It is hoped that the mediation game will be an alternative way to educate, and generate a peaceful mentality among the new generation in law schools so that they, eventually, become ready for seeking out amicable solutions for people and social justice.

The after action review via online surveys of samples revealed some interesting issues, as follows:

#### 4.1 Mediation Game Itself Did Not Promote Players' Conflict

Due to the fact that the mediation game has a win-lose concept, the game will be over when one player reaches the ending point. As a result, the game's concept of competition has been questioned as regards encouraging the players to learn the win-win concept. Remarkably, more than 80% of the samples responded that they had never applied the reconciliation card or gotten into quarrels during the game. The reminding respondents described that the reconciliation card sometime were applied for making the clear answers or just had a will to try its function. This is explained that the game itself had not caused any conflict among the players. According to the survey results, this is because they understood that it was just about the game's strategy and mostly they are friends. Sometimes they found consensus solution together by listening to each other reasons, so applying reconciliation card was not necessary. The game concept, as a matter of fact, encouraged the players to enjoy the game.

# 4.2 Rooms for Development

Additionally, the samples provided some interesting feedback toward the development of the mediation game for better learning and engagement, as follows:

- Some open-ended questions are too long, and the players can easily lose concentration and get bored with the questions. Rearranging by shortening them and also provide paper for short note will promote better learning engagement.
- 2) The random questions approach for quick quiz can get the players excited, but it may not systematically

promote appropriate mediation understanding. Rearranging the questions into the respective series of domain knowledge under the quick-quiz concept will encourage better knowledge understanding in the players.

In conclusion, the study demonstrated the potential of the mediation game in encouraging mediation knowledge and learning engagement in a certain group of law students. However, there will certainly be a room for further study to discover the effectiveness of this method as regards the different kinds of samples under the scope of population study.

#### References

- American-Bar-Association. (1992). Report of The Task Force on Law Schools and The Profession: Narrowing the Gap.
- Anderson, L. W., Krathwohl, D. R., & Bloom, B. S. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Allyn & Bacon.
- Barbazette, J. (2006). The art of great training delivery: Strategies, tools, and tactics. John Wiley & Sons.
- Bock, H., Boyd, C., Gibson, S., Lyons, P., Mottershead, T., Rose, L. M., . . . Westfahl, S. (2009). *The Future of Legal Education: A Skills Continuum* (pp. 5-6, 7-30). Nation Institute for Trial Advocacy.
- Browne, K. (2005). Snowball sampling: Using social networks to research non-heterosexual women. *International Journal of Social Research Methodology*, 8(1), 47-60. http://dx.doi.org/10.1080/1364557032000081663
- Case-Western-Reserve-University-School-of-Law. (2011). CaseArc integrated lawyering Skills program.
- Clark, E. E. (1993). Legal education and professional development-An educational continuum, Report of the Task Force on law schools and the profession: Narrowing the gap (Illinois: American Bar Association 1992). *Legal Educ. Rev.*, *4*, 201.
- Collins, K., Kanev, K., & Kapralos, B. (2010). Using games as a method of evaluation of usability and user experience in human-computer interaction design. Paper presented at the *Proceedings of the 13th International Conference on Humans and Computers, Aizu-Wakamatsu, Japan*.
- Faculty-of-Law-Chiang-Mai-University. (2014). Annual Report. Chiang Mai, Thailand.
- Faculty-of-Law-Chularongkorn-University. (2012). Annual Report. Bangkok, Thailand.
- Faculty-of-Law-Thammasat-University. (2011). *Undergraduate Program Guide Book*. Bangkok, Thailand: Thammasat University.
- Ferber, P. S. (2002). Adult learning theory and simulations-Designing simulations to eduate lawyers. *Clinical L. Rev.*, 9, 417.
- Fine, T. M. (2009). Reflections on US law curricular reform. *CLPE Research Paper*(25/09), 718-726. http://dx.doi.org/10.2139/ssrn.1478728
- Friedland, S. I. (1996). How we teach: A survey of teaching techniques in American law schools. *Seattle UL Rev.*, 20, 3.
- Givelber, D., Baker, B. K., McDevitt, J., & Miliano, R. (1995). Learning through work: An empirical study of legal internship. *Journal of Legal Education*, 45(1), 3.
- Goodman, L. A. (1961). Snowball sampling. *The annals of mathematical statistics*, 148-170. http://dx.doi.org/10.1214/aoms/1177705148
- Great-Schools-Partnership.org. (2015). *Student Engagement The Glossary of Education Reform*. Retrieved from http://edglossary.org/student-engagement/
- Irish, C. R. (2006). Reflections of an observer: The international conference on legal education reform. *Wisconsin International Law Journal*, 24, 5-22.
- Kahu, E. R. (2013). Framing student engagement in higher education. *Studies in Higher Education*, *38*(5), 758. http://dx.doi.org/10.1080/03075079.2011.598505
- Kanthong, A. (December 3, 2012). What and How Does the Lawyer Conduct Mediation? [Thai Translation]/Interviewer: C. Luengvilai.
- Kaplan, C. D., Korf, D., & Sterk, C. (1987). Temporal and social contexts of heroin-using populations: An illustration of the snowball sampling technique. *The Journal of nervous and mental disease*, 175(9),

- 566-574. http://dx.doi.org/10.1097/00005053-198709000-00009
- Krathwohl, D. R. (2002). A revision of Bloom's Taxonomy: An overview. *THEORY INTO PRACTICE*, 41(4). http://dx.doi.org/10.12816/0007239
- Law-Reform-Commission-of-Thailand. (2011). Retrieved from http://www.lrct.go.th/th/
- Lee, S. S. R. (2009). Legal education in Korea: New law school reforms. In S. Steele, & K. Taylor (Eds.), *Legal Education in Asia; Globalization, Change and Contexts* (Vol. 9, pp. 169-182). Florence, KY, USA: Routledge.
- Luengvilai, C., & Yodmongkol, P. (2011, November 2-4, 2011). What fundamental lawyering skills do law students of Chiang Mai University need to improve their legal practice ability? Paper presented at the The 11th Annual SEAAIR Conference: University Social Responsibility: Patways to Excellence, Chiang Mai, Thailand.
- Sadler, G. R., Lee, H.-C., Lim, R. S.-H., & Fullerton, J. (2010). Recruiting hard-to-reach United States population sub-groups via adaptations of snowball sampling strategy. *Nursing & Health Sciences*, *12*(3), 369-374. http://dx.doi.org/10.1111/j.1442-2018.2010.00541.x
- Sathirathai, S. (Febuary 8, 2013). What and How Does the Lawyer Conduct Mediation? [Thai Translation]/Interviewer: C. Luengvilai.
- Seligman, M. E., Verkuil, P. R., & Kang, T. H. (2005). Why lawyers are unhappy. Deakin L. Rev., 10(1), 50,60.
- Sonsteng, J., Cicero, J., Gilats, R., Haydock, R., & McLachlan, J. (1995). Learning by doing: Preparing law students for the practice of law. *William Mitchell Law Review*, 21.
- Thailand Statistics Division, T. a. D., Office of the Judiciary. (2009). *Annual Judicial Statistics, Thailand B.E* 2552. Bangkok, Thailand: Sahamitr PressPub.
- Thailand Statistics Division, T. a. D., Office of the Judiciary. (2010). *Annual Judicial Statistics, Thailand B.E* 2553. Bangkok, Thailand: Sahamitr PressPub.
- Thailand Statistics Division, T. a. D., Office of the Judiciary. (2013). *Annual Judicial Statistic of Thailand B.E* 2556. Bangkok, Thailand: Sahamitr PressPub.
- Thailand-Cabinet. (August 18, B.E 2552 (2009)). Thailand cabinet approval No. 15201/2552.
- Thammasat-University-Research-and-Consultantcy-Institute. (2010). Research report: Restorative Justice Process in Court of Justice.
- Thompson, S. E. (2009). Developing a comprehensive approach to teaching lawyering skills: A response to the MacCrate Report, Fifteen years later. *Liberty UL Rev.*, *3*(55-70), 70.
- Trowler, P., & Trowler, V. (2010). Student engagement evidence summary (pp. 7-10). Retrieved from http://eprints.lancs.ac.uk/61680/1/Deliverable 2. Evidence Summary. Nov 2010.pdf
- Tubwong, C. (November 29, 2012). What and How Does the Lawyer Conduct Mediation? [Thai Translation]/Interviewer: C. Luengvilai.
- Vatanasapt, V. (August 29, 2012). What and How Does the Lawyer Conduct Mediation? [Thai Translation]/Interviewer: C. Luengvilai.
- Wegner, J. W. (2009). Symposium 2009: A legal education prospectus: Law schools & Emerging frontiers reframing legal education's "WICKED PROBLEMS". *Rutgers Law Review, 61*, 875-886.
- Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active learning in higher education*, 11(3), 167-177. http://dx.doi.org/10.1177/1469787410379680

# **Appendix**

List of names of three persons having major law career paths and their individually recommended lists of names of legal experts with expertise in mediation skills

# Significant persons with careers in three major law disciplines

- 1. Mr. JadesadaAnujaree (Representative of the president of the law society of Lawyers' Council of Thailand)
  - Former committee member of the Lawyers' Council of Thailand
  - Director of the Lawyer Training Bureau of the Lawyers' Council of Thailand
- 2. Mr. AnuchartKongmalai (Representative of the Attorney General of the Attorney General of Thailand)
  - Former deputy of the Attorney General of the Attorney General of Thailand. Senior Prosecuting Attorney, Director of the Knowledge Management Department of the Office of the Attorney General of Thailand, etc.
- 3. Professor Dr. Witsanu Kruea-ngam (Representative from the legal education sector)
  - Deputy Prime Minister of Thailand 2014 until now, Former Secretary General of the Cabinet of Thailand and Lawyer
  - Executive Counselor or committee member in both private and government organizations

# Recommended lists of names of legal experts with expertise in mediation skill

- 1. Professor Dr. Surakiart Sathirathai
  - Former Minister of Foreign Affairs, Thailand
  - Chairman of the Asian Peace and Reconciliation Council (APRC)
  - Chairman of the Board of Directors, Siam Premier International Law Office, Ltd.
- 2. Professor Medical Doctor Vanchai Vatanasapt
  - Former President of KhonKaen University, Thailand
  - Director of Leader shift Conflict Resolution and Mediation Program, RUC School, KhonKaen, Thailand, etc.
- 3. Mr. Nopporn Potirungsiyanon
  - Chief Judge of the Supreme Court, Thailand
  - Expert mediator and special guest lecturer for mediation skills, etc.
- 4. Mr. Nattachak Pattamasigh Naayuthaya
  - Director-General of the Attorney General of Thailand
  - Arbitrator of the Court of Justice, Thailand, etc.
- 5. Mr. Kitipong Urapeepatanapong
  - Chairman of the Baker & McKenzie Ltd., Thailand
  - Special guest lecturer, etc.
- 6. Mr. Weerawong Chittmittrapap
  - Director, The Siam Commercial Bank Public Company Limited, etc.
  - Named one of the world's leading lawyers by the international Financial Law Review (IFLR)
- 7. Mr. Adoon Khunthong
  - Chief Judge of the Appeal Court, Thailand
  - Advisor for Ministry of Justice, Thailand and Expert mediator and special guest lecturer for mediation skills
- 8. Mr. Chotechuang Tubwong
  - Chief Judge of the Appeal Court, Thailand and Expert mediator and special guest lecturer for mediation skills, etc.
- 9. Mr. Jadesada Anujaree
  - Former committee member of the Lawyers' Council of Thailand
  - Director of the Lawyer Training Bureau of the Lawyers' Council of Thailand, etc.

# Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).