

Better Learning of Chinese Idioms through Storytelling: Current Trend of Multimedia Storytelling

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Abstract: Storytelling plays a vital role to impart a nation's tradition, cultural beliefs and history to future generation. It is frequently used for the purpose of sharing or exchanging information as it enables the messages to be conveyed to the audience easily. Storytelling acts as a tool of human social interaction and is commonly used in education for learning, explaining and entertaining. Due to the learning effectiveness brought up by storytelling, this study is aimed to compare and differentiate the feasibility of traditional storytelling and multimedia storytelling in motivating and leveraging the non-native novices' learning of Chinese idioms. A total of 83 non-native novices who have attended the Chinese as Foreign Language Course in a local private university of Malaysia were selected as the research sample and divided into two groups. 43 participants were placed in the experimental group and studied the Chinese idioms with a developed multimedia storytelling prototype (MSP), whereas the other 40 participants in the conventional teaching group learned the new knowledge through traditional storytelling. A Chinese idiom test and survey questionnaires were distributed to the non-native novices to examine their learning achievement and preferences towards the learning approaches. Results showed that the students in the experimental group scored higher and had greater satisfaction towards the Chinese idiom learning than the learners from the conventional group.

Keywords: multimedia storytelling; traditional storytelling; foreign language learning; Chinese idiom learning; non-native novices

1. Introduction

Story can be in real or virtual form. It can be utilized as a way to deliver messages, knowledge, values and wisdom to the audience (Xu, Park & Baek, 2011). Storytelling is the act of presenting stories (Cambridge Dictionaries Online, 2015). It has been existed for thousands of years and serves as the oldest form of education (Hamilton & Weiss, 2005). Storytelling is often adopted to share or exchange the information as well as to improve a person's comprehension (Malita & Martin, 2010). It is a valuable form of human expression and social interaction which is commonly exploited in communication, learning and entertainment (Hamilton & Weiss, 2005; Xu, Park, & Baek 2011). Storytelling links up the interaction between the story teller and listeners. The tight connection between both sides has led to better communication as the messages are transmitted directly and easily (Yang & Wu, 2012).

Nowadays, the traditional storytelling has been transformed and expressed in the form of digital storytelling due to the development of advanced technology (Malita & Martin, 2010). This new edition of storytelling makes use of the combination of narration and multimedia elements, such as words, pictures, animation and video to convey the information to the audience (Li, Hew & Choo, 2016). The usage of digital storytelling is found increasing in various aspects of academic, including language, history, science, medicine and religion owing to its potential of providing multi-sensory learning environment to the learners (Han, 2007; Malita & Martin, 2010). For instance, Tsou, Wang and Tzeng (2006) had developed a digital storytelling website to assist the students of primary school in English learning. The experiment indicated that the students were motivated and able to recall their learning contents easily with the aid of digital storytelling.

Yang and Wu (2012) had also supported the using of digital storytelling in English as foreign language learning. The investigation showed that the students who completed their coursework projects through digital storytelling performed better and had greater interest to explore. A similar study conducted by Razmi, Pourali and Nozad (2014) shown that the application of digital storytelling had successfully developed the undergraduate students' English learning skills. The learners' motivation and creative thinking improved as they have to create their own digital stories with multimedia elements for the English lesson. Since the using of digital storytelling had led to effective learning, Thang, Sim, Mahmud, Lin, Zabidi and Ismail (2014) had sought out the educators and learners' opinions towards digital storytelling as an alternative tool in learning. The

teachers and students responded positively that learning through digital storytelling would drive the students to participate actively in their learning process and worked independently.

Due to the various benefits brought about by digital storytelling in learning, a multimedia storytelling prototype was captured and created to aid the non-native novices to learn Chinese idioms in this study. Chinese idiom is part of Chinese language. It is usually formed by four Chinese characters and mostly originated from a Chinese history or ancient literature. A Chinese idiom consists of a terse meaning which can be used to explain a circumstance concisely (Stellard, 2011). It is prevalent and commonly used in Chinese communication as the messages can be conveyed from the speakers to the listeners vividly and quickly. As Chinese idiom is one of the priceless cultural legacies and contributes in Chinese vocabulary learning, it should be spread and popularized among the Chinese language learners, including the non-native learners. As the enormous development of China has heightened the popularity of Chinese traditional culture, Chinese language is now widely studied by foreigners and non-Chinese background learners (Chen, Wang, Chen & Chen, 2014). There are a lot of non-native speakers or enthusiasts attending Chinese language classes offered by numerous educational institutes to improve their Chinese speaking, listening, reading and writing abilities. In Malaysia, most of the higher education institutes allow the non-native speakers to take Chinese as foreign language learning due to its wide usage among the multiracial Malaysian communities (Yin and Ho, 2013). Despite the fact that the Chinese idiom is part of Chinese language, it is usually not included at the beginning level of Chinese language learning due to its complexity in structure. Therefore, the Chinese idiom is mostly studied by the advanced or native learners (Stellard, 2011). In Malaysia, the Chinese language classes are still restricted to traditional teaching and learning method. This educational approach is an one-way communication as the instructors will present the information according to their paces and talk continuously for a lesson. This monologue presentation ensues insufficient interaction between the instructors and learners, which causes the learners to become passive and negative in their learning (Zin, Latif, Bhari, Sulaiman, Rahman, Mahdi, Jamain, 2012). Chinese idiom is included in the Chinese language syllabus, Apart from Chinese idiom, the learners will also study the Chinese characters, pinyin, vocabulary, grammar and literature during the Chinese language classes (See, 2013). Hence, the Chinese language teachers have to cover all teaching syllabuses during the classes. However, the given period for a lesson is insufficient for the instructor to teach all the syllabuses. In order to complete teaching within the time limit, the teachers will usually deliver the important information to the students rather than presenting the backstory of Chinese idioms in detail as many teachers think that storytelling is a time consuming process. The students are less likely to fully understand the origins of Chinese idioms and the derived cultural traits from the history.

In this study, Chinese idiom is introduced to the non-native novices and this new information will enhance the learners' interest and understanding in Chinese language and culture learning. Comparatively, the traditional teaching and learning method is less effective to motivate the learners' willingness to explore for new knowledge due to the factors discussed above. Despite that many Chinese idiom learning systems can be found online and accessed easily by the learners, however, the learning mechanisms are mostly created for the native learner. This has caused the learning difficulty to the non-native novices as they are still new and unfamiliar to Chinese language. There are only a handful of Chinese idiom learning websites can be accessed by the non-native learners, including e-Chinese Learning (<http://www.echineselearning.com>), ForeignerCN (<http://www.foreignercn.com>), Chinese Scholar (<http://www.chinese.hm68.com>), Better Chinese (<http://www.betterchinese.com>) and Just Learn Chinese (<http://www.justlearnchinese.com>). These websites are created by the Chinese culture enthusiasts to share their Chinese experiences with the foreigners and non-native learners. However, some limitations are found and identified by Mayer's multimedia learning theory (Mayer, 2009), which include the content presentation in static web pages with only printed words and static pictures, the separated presentation of animation and English explanation has caused the learners to study redundant information successively which has resulted to the cognitive overloads in learners working memories. In order to solve the abovementioned problems, a multimedia storytelling prototype is designed and developed purposely based on the limitations reviewed from the exiting websites for the non-native novices in the learning of Chinese idioms.

2. Purpose of the Study

This study is aimed to enhance the non-native novices' learning interest towards the Chinese language and culture through appreciating Chinese idioms by using the developed multimedia storytelling prototype (MSP).

In order to examine the feasibility of the developed prototype, an experiment has been implemented to determine and differentiate its effectiveness with the traditional storytelling in ordinary classroom.

The experiment was conducted according to the following research questions:

1. How did the multimedia storytelling prototype (MSP) enhance the traditional teaching and learning method in Chinese idioms?
2. Why is the multimedia storytelling prototype (MSP) feasible to be served as a self-learning tool for non-native novices to study Chinese idioms?

2.1 Concept for the Development of Multimedia Storytelling Prototype (MSP)

A multimedia storytelling prototype (MSP) was developed and subsequently hosted into internet for the purpose of investigation. The concept for the development of MSP was shown in Figure 1. In order to aid the non-native novices to comprehend Chinese idioms in an easy way, the origins of Chinese idioms were composed and designed into digital stories based on the five essential story elements, include setting, plot, characters, conflict and resolution (Kent, 2015; Yang & Wu, 2012). By determining the story elements, the learners were able to understand the derivation of Chinese idioms in detail.

A Chinese dynasty timeline was created to provide the non-native novices a better understanding towards the setting (time and location) of the happened historical event. The dynasty timeline will help the non-native novices to understand “where” and “when” the historical incident of the Chinese idiom occurred. The backstory of the Chinese idiom was presented in the form of digital storytelling. During the story presentation, the plot, characters, conflict and resolution of the backstory would be illustrated. Thus, the learners were able to study the background of Chinese idiom through knowing “what” was the incident about, “who” were the characters of the incident, “why” was the Chinese idiom named in such a manner, and “how” the incident generated the Chinese idiom. The studying of the historical incident would facilitate the non-native novices to comprehend the literal translation and exact meaning of the relevant Chinese idiom. Apart from that, the cognitive theories of multimedia learning, including multimedia principle, redundancy principle, modality principle, temporal contiguity principle, coherence principle, personalization principle, signaling principle and voice principle (Mayer, 2009; 2014) were applied to the composing of digital story to assist the learners for better Chinese idiom learning.

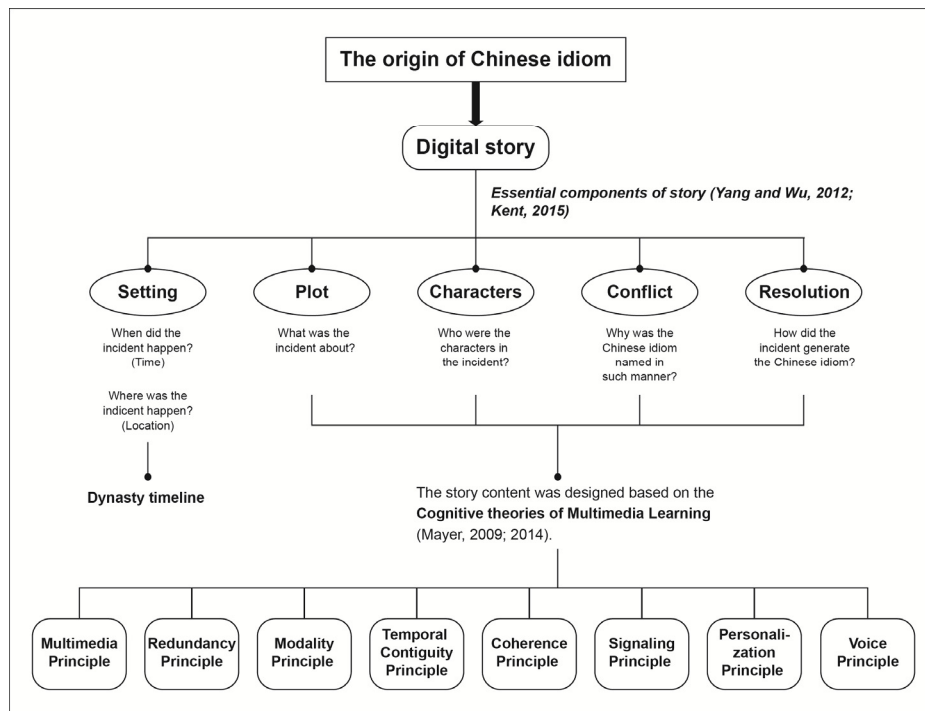


Figure 1: Concept for the development of MSP

3. Method

Quantitative and qualitative methods were adopted in this study to obtain numerical data and opinions from the selected samples. A Chinese idiom test and survey questionnaires were given to all participants to examine their comprehension of the learned Chinese idioms and preferences towards the learning approaches.

3.1 Sample

A total of 83 participants are selected to run this study. There are the undergraduate students who have attended the Chinese as Foreign Language Course in a local private university. The course is only offered to the non-native novices. Thus, these selected participants are non-Chinese and considered Chinese language as their foreign language. All of them have no prior knowledge and experience with Chinese language, neither speaking, reading, writing nor listening. After their registration for the Chinese as Foreign Language Course, they are assigned randomly by the university into two classes to attend the Chinese language lessons. There are 43 students in the first classroom, and 40 students are placed in the second classroom.

3.2 Experimental Procedure

An experiment was carried out to compare the learning effectiveness between MSP and traditional storytelling in the learning of Chinese idioms. 43 students from the first classroom were assigned in the experimental group, while the other 40 participants in the second classroom were allocated to the conventional teaching group. The participants from both groups studied the same Chinese idioms but with different learning approaches. The learners in the conventional teaching group studied the origins of Chinese idioms through traditional storytelling and they were given a lecture by the instructor using white board and lecture notes. At the same time, the students of the experimental group learned the Chinese idioms via MSP. By interacting with the prototype, the students of the experimental group could access the Chinese idiom lesson through multimedia storytelling (as shown in Figure 2 and Figure 3). Three Chinese idioms have been chosen for the learning, which were “百发百中 (bai fa bai zhong)”, “刮目相看 (gua mu xiang kan)”, and “胸有成竹 (xiong you cheng zhu)”. The meaning, pronunciation, historical background, characters and the usage of Chinese idioms were taught in the learning content. Although the Chinese idioms were randomly picked for the learning, however, the selection was based on two key factors: historical values and applicability. As mentioned earlier, most of the Chinese idioms have their own historical values and impacts on Chinese cultural heritages. Hence, the selected Chinese idioms are classical allusions originated from historical events and the stories had indeed happened during the ancient times. While appreciating the Chinese idioms, the non-native speakers can also understand the precious Chinese cultures and histories through the stories. Apart from historical values, the chosen Chinese idioms are also commonly used in the Chinese community nowadays.

In order to avoid bias and ensure the validity of data, the backgrounds of the 83 participants have been verified with the university and also their Chinese language lecturer. They have proved that the participants were indeed novices and new to Chinese language. As mentioned previously, the participants have been divided into two groups for the investigation. Both groups were tested and examined in two different situations at the same time. The researcher and assistant researcher served as the storyteller and facilitator during the investigation. When the researcher works as storyteller to share the idioms and relevant classical allusions to the students of conventional teaching group, the assistant researcher plays the role as the facilitator to guide the participants of the experimental group to learn Chinese idioms through the developed prototype in the computer lab. The participants from both groups were given 30 minutes to complete the Chinese idiom learning. Subsequently, a Chinese idiom test with 15 questions is given to all students within 15 minutes to examine their understanding of the learned Chinese idioms during the short timeframe of learning. After the test, the students were required to evaluate their learning process through survey questionnaires in 30 minutes. Two sets of different survey questions were designed respectively for each group. The students of the experimental group evaluated their learning process through MSP, while the students of the conventional teaching group assessed the traditional storytelling and lecture by the instructor. The investigation of both groups started and ended at the same time. Thus, all participants have no chance to discuss with each other the contents and learning materials. The results acquired from both groups were examined and analyzed.

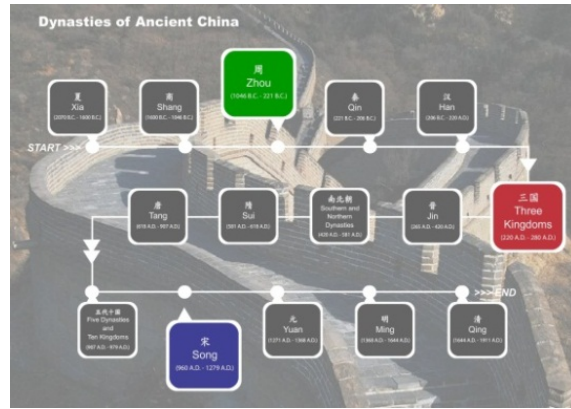


Figure 2: Content presentation of prototype (1)

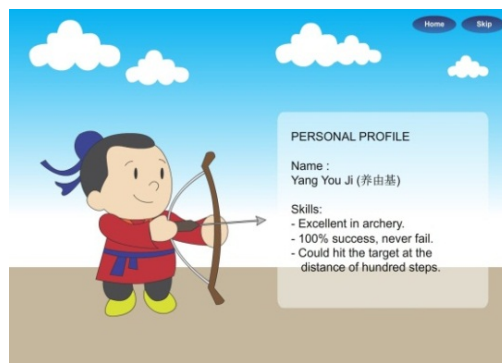


Figure 3: Content presentation of prototype (2)

4. Results and Analysis

The Chinese idiom test aims to examine the participants’ knowledge of the learned Chinese idioms. It is divided into three sections, namely meaning and pronunciation, history and characters, and the using of Chinese idioms. The test consists of 15 questions, including 11 multiple choice questions and 4 writing questions. Each question carries one mark, i.e. a total of 15 marks for the Chinese idiom test.

4.1 Results of Chinese Idiom Test

A Shapiro-Wilk normality test was utilized to examine the normality of data for the Chinese idiom test. It was discovered that the scores of Chinese idiom test for the experimental group and the conventional teaching group did not have a normal distribution ($p < 0.05$). Thus, a non-parametric test, Mann-Whitney U test was exploited to analyze the data findings.

Table 1: U-test result of Chinese idiom test

Group	n	Mean Rank	Sum of Rank	Median	U	z	p
Experimental group	43	56.31	2421.5	14	244.5	-5.725	.000
Conventional teaching group	40	26.61	1064.50	12			

Table 1 indicates the results of Chinese idiom test. A Mann-Whitney U test is carried out to determine the hypothesis that the non-native novices of the experimental group score higher in average than the conventional teaching group in the Chinese idiom test. Descriptive statistics reveals that the students of the experimental group ($Mdn = 14$; mean rank = 56.31) indeed score higher in the Chinese idiom test than the students of the conventional teaching group ($Mdn = 12$; mean rank = 26.61). The result is statistically

significant as $U = 244.5$ ($z = -5.725$), $p < 0.01$, and the difference between the experimental group and the conventional teaching group is large ($r = -0.628$).

From the results, it can be stated that the non-native novices of the experimental group who learned the Chinese idioms through multimedia storytelling can perform better in the Chinese idiom test rather than the non-native novices of the conventional teaching group who study the learning contents via traditional storytelling in ordinary classroom.

4.2 Evaluation Results

Five-point likert scales, with 5 being the best and closed-ended questions are applied in the survey questionnaires. The questions are categorized into three sections, namely learning motivation, interactivity and communication, and content presentation. Each participant is given an evaluation sheet and required to rate for the learning approach. In addition, open-ended questions are also utilized to obtain the opinion and feedback in fuller statements from the participants.

Table 2: Results for Students' Learning Motivation

Experimental Group				
No	Section 1: Learning Motivation	Mean	Standard Deviation	Percentage of agreed and strongly agreed (%)
1	I enjoyed learning with multimedia storytelling.	4.67	0.56572	95%
2	I found that multimedia storytelling was interesting and engaging.	4.72	0.45385	100%
3	Multimedia storytelling helped me to understand the Chinese idioms better.	4.53	0.50468	100%
4	Interacting with the application increased my motivation to learn.	4.42	0.69804	88%
5	I can apply what I have learned from multimedia storytelling in real-life.	4.16	0.68765	84%
Conventional Teaching Group				
No	Section 1: Learning Motivation	Mean	Standard Deviation	Percentage of agreed and strongly agreed (%)
1	I enjoyed learning with traditional storytelling in ordinary classroom.	3.78	0.83166	75%
2	I found that traditional storytelling in ordinary classroom was interesting and engaging.	3.6	1.00766	65%
3	The lecturer's explanation helped me to understand the Chinese idioms better.	4.03	0.76753	90%
4	Traditional storytelling in ordinary classroom increased my motivation to learn.	3.55	1.01147	55%
5	I can apply what I have learned from the class in real-life.	3.6	0.90014	52%

Table 2 shows the evaluation results of the students' learning motivation from both experimental group and conventional teaching group. According to the table, it can be seen that the non-native novices of the experimental group have shown higher learning motivation than the learners of the conventional teaching group. 88% of the students from the experimental group agree and strongly agree (question 4, under experimental group) that the MSP has increased their motivation to learn Chinese idioms, and a mean score of 4.42 ($SD = 0.698$) is rated for this statement. Conversely, there is merely 55% of students from the conventional teaching group agree and strongly agree (question 4, under conventional group) that their learning interest and enthusiasm are enhanced through traditional storytelling. A mean score of 3.55 ($SD = 1.011$) is given for this statement by the students from the conventional teaching group.

Meanwhile, 95% of students from the experimental group agree and strongly agree (question 1, under experimental group) that they enjoy the Chinese idiom learning through multimedia storytelling ($M = 4.67$, $SD = 0.566$). All the students find that multimedia storytelling is interesting and engaging (question 2, under experimental group) by giving a mean score of 4.72 ($SD = 0.454$). In addition, the students are also consented with the multimedia storytelling which has assisted them to better understand Chinese idioms (question 3, under experimental group), where a mean score of 4.53 ($SD = 0.505$) is rated for this statement. On the other hand, 75% of students from the conventional teaching group agree and strongly agree (question 1, under conventional teaching group) that they enjoy the Chinese idiom learning through traditional storytelling by giving a mean score of 3.78 ($SD = 0.832$). 65% of them agree and strongly agree (question 2, under conventional teaching group) that learning through traditional storytelling is interesting and engaging ($M = 3.6$, $SD = 1.008$). Besides that, 90% of the students in the conventional teaching group agree and strongly agree (question 3, under conventional teaching group) that the lecturer's explanation has assisted them to understand the Chinese idioms better. A mean score of 4.03 ($SD = 0.768$) is given for this statement.

The use of learned knowledge is vital in learning process. There is 84% of the students from the experimental group agree and strongly agree (question 5, under experimental group) that they can apply their learning knowledge in their real life by giving a mean score of 4.16 ($SD = 0.688$). In the conventional teaching group, there is only 52% of students agree and strongly agree (question 5, under conventional teaching group) that they can employ Chinese idioms in their daily lives ($M = 3.6$, $SD = 0.900$).

Table 3: Results for Students' Interactivity and Communication

Experimental Group				
No	Section 2: Interactivity and Communication	Mean	Standard Deviation	Percentage of agreed and strongly agreed (%)
1	The quiz in the multimedia storytelling prototype enhanced my knowledge about Chinese idioms and histories.	4.56	0.58969	95%
2	The message was delivered clearly through the multimedia storytelling.	4.49	0.5925	95%
3	The application allowed me to learn in my own paces.	4.44	0.70042	89%
Conventional Teaching Group				
No	Section 2: Interactivity and Communication	Mean	Standard Deviation	Percentage of agreed and strongly agreed (%)
1	I could understand the meaning and history of the Chinese idioms very well through traditional storytelling.	3.78	0.8912	71%
2	The message was delivered clearly through the lecture.	4.0	0.84732	83%
3	I could learn the contents in my own paces.	3.45	1.08486	56%

Interaction facilitates a better communication between learners and learning contents. According to Table 3, 95% of the students in the experimental group agree and strongly agree (question 1, under experimental group) that the added quiz in the MSP has boosted their knowledge in Chinese idioms by giving a mean score of 4.56 ($SD = 0.590$). In the conventional teaching group, 71% of the students agree and strongly agree

(question 1, under conventional teaching group) that they can understand the learning contents through traditional storytelling ($M = 3.78$, $SD = 0.891$).

A successful delivery of message will speed up learning. The information is expressed clearly through multimedia storytelling, where a mean score of 4.49 ($SD = 0.593$) is rated by the students of the experimental group. 95% of them agree and strongly agree with the statement (question 2, under experimental group). However, the explanation of learning contents by the instructor through lecture and storytelling is also complimented by the students of the conventional teaching group. 83% of the students agreed and strongly agreed (question 2, under conventional teaching group) with the statement and a satisfactory mean score of 4.0 ($SD = 0.847$) is rated for this statement.

Meanwhile, 89% of the students in the experimental group agree and strongly agree (question 3, under experimental group) that the MSP allows them to study in their own paces. A mean score of 4.44 ($SD = 0.700$) is rated by the students for this statement. Despite the conveying of learning contents through traditional storytelling in lecture class has satisfied the students in the conventional teaching group, but only 55% of them agree and strongly agree that they can control their own learning paces (question 3, under conventional teaching group). This is evident by the mean score of 3.45 ($SD = 1.085$) given by the students.

Table 4: Results for Content Presentation

Experimental Group				
No	Section 3: Content Presentation	Mean	Standard Deviation	Percentage of agreed and strongly agreed (%)
1	The information is clear, concise and easy for me to understand.	4.44	0.58969	96%
2	The animation and graphics enhanced my understanding about the story of Chinese idioms.	4.67	0.56572	95%
3	The application is well presented.	4.37	0.61811	93%
Conventional Teaching Group				
No	Section 3: Content Presentation	Mean	Standard Deviation	Percentage of agreed and strongly agreed (%)
1	The information is clear, concise and easy for me to understand.	3.93	0.65584	80%
2	I could visualize the story of Chinese idioms when listened to the lecturer's storytelling.	3.58	0.87376	58%
3	The teaching contents were well-presented.	3.85	0.69982	73%

A well-presented learning content allows the information to be delivered to the students easily. As shown in the Table 4, 93% of the students in the experimental group agree and strongly agree (question 3, under experimental group) that the learning content is well-presented. A mean score of 4.37 ($SD = 0.618$) is recorded for the presentation of the MSP. In addition, the message is clear, concise, and easy to understand ($M = 4.44$, $SD = 0.590$), where the statement is agreed and strongly agreed by 96% of them (question 1, under experimental group).

On the other hand, a mean score of 3.85 ($SD = 0.700$) is rated by the students in the conventional teaching group for the content presentation. 73% of the students agree and strongly agree (question 3, under conventional teaching group) that the teaching content is well-explained by the lecturer. Furthermore, 80% of the students also agree and strongly agree (question 1, under conventional teaching group) that they can understand the information easily and clearly. A satisfactory mean score of 3.93 ($SD = 0.656$) is given in this assessment. Based on the aforementioned evaluation results, it can be seen clearly that the students in the conventional teaching group felt satisfied with the content presentation too.

Animation and graphics are utilized in the MSP to stimulate the users' sense of vision. The outcome indicates that 95% of the students in the experimental group agree and strongly agree (question 2, under experimental

group) that the animation and graphics have improved and upraised their understanding towards the story of Chinese idioms by rating a mean score of 4.67 ($SD = 0.566$). However, in the conventional teaching group, there is only 58% of the students agree and strongly agree (question 2, under conventional teaching group) that they can visualize the stories and characters of the Chinese idioms by listening to the lecturer. A mean score of 3.58 ($SD = 0.874$) is given by the students in this evaluation.

4.3 Student Feedback towards the Learning Approaches

Table 5: Student Feedback of the Experimental Group

Experimental Group
<p>Section 1: Motivation</p> <ul style="list-style-type: none"> - Multimedia storytelling is helpful and increases my motivation in learning Chinese idioms. - The graphics and animation attract my attention and enhance my efficiency of Chinese idiom learning.
<p>Section 2: Interaction & Communication</p> <ul style="list-style-type: none"> - I can slowly pick up and learn based on my own pace and own way through the prototype. - The prototype is user friendly and easy to navigate. I can repeat or skip the learning contents according to my learning curve. - The well-presented graphics and animation helped me to visualize and imagined the histories better and easily. - The presentation of the learning content is simple and direct which has enhanced my understanding about the Chinese idioms and their origins. - I have gained extra knowledge through the dynasty timeline. It helps me to understand the period and place of the story better.
<p>Section 3: Content Presentation</p> <ul style="list-style-type: none"> - The prototype is suitable for beginners like us to learn better. - The prototype is engaging and interesting as it is well-organized and informative. - The using of graphics and animation makes me focus more on learning contents. - The prototype is suitable for self-learning. I can access the learning whenever I want. - The meaning, stories and examples provided have helped me to understand and memorize easily. - The Chinese pinyin and English translation have helped me to read and understand the learning contents.

Table 6: Student Feedback of the Conventional Teaching Group

Conventional Teaching Group
<p>Section 1: Motivation</p> <ul style="list-style-type: none"> - Traditional storytelling and lecture class are a bit boring for me and they don't motivate me much. - I don't prefer this learning method as I always have to catch up the lecturer's teaching paces. - The learning is funny, but it's hard for me to visualize and imagine the histories.
<p>Section 2: Interaction & Communication</p> <ul style="list-style-type: none"> - Learning through traditional storytelling and lecture class help me to memorize. I can write down the important points when I listen to the teaching contents. - This method fosters live communication as the students can interact with the lecturer. - The lecturer explains the information and tells the story very well. - I prefer study through traditional learning method as Q&A session is always available during the class. I can question whenever I have any doubt towards the learning. - The Chinese idiom learning is interesting, but I couldn't imagine the stories very well.
<p>Section 3: Content Presentation</p> <ul style="list-style-type: none"> - The messages and stories were presented clearly by the lecturer. - The storytelling has helped me to understand the background of Chinese idiom better and the lecture enhances my understanding. - The learning contents and stories are easy to understand and well-presented.

Table 5 and Table 6 conclude the students' feedback from both experimental group and conventional teaching group. The students have shared their opinions or comments towards their learning approaches through the open-ended questions which were given to them. The students' feedbacks are divided into three parts, including motivation, interaction & communication and content presentation. According to their feedback, the students of the experimental group compliment and satisfy with their learning through multimedia storytelling. They enjoy learning Chinese idioms through MSP as the creative presentation has grabbed their attention and evoked their learning interest successfully (referred to Table 5, under the section of motivation). The adding of the interactivity in the prototype enables them to interact with the learning contents and they can control their own learning paces (referred to Table 5, under the section of interaction & communication). Besides that, the students indicate that their learning process has become easy with the aid of animation and graphical contents as the visual elements have assisted them to imagine and visualize the stories of Chinese idioms. The use of dynasty timeline has also helped them to understand the time and location of the derived historical incidents better. In addition, the students reveal that the prototype is well-organized and informative (referred to Table 5, under the section of content presentation). They declare that the message is delivered in a direct and simple way which is easy to understand. The aids of the English translation and Chinese pinyin have also facilitated the students' Chinese pronunciation and comprehension towards the learning contents.

In the conventional teaching group, the students learn Chinese idioms through traditional storytelling and lecture class. With the lecturer's explanation, they have learned the Chinese idioms successfully. The evaluation result of the conventional teaching group is considered as an overall satisfaction. However, the students of the conventional teaching group have different points of view towards the traditional storytelling in ordinary classroom. Most of the students preferred learning Chinese idiom by attending a lecture class. They agree that this teaching method has fostered live communication as they can consult with the lecturer about their doubt anytime during the lesson (refer to Table 6, under the section of interaction & communication). Additionally, the students have also complimented on the given lecture and storytelling by the instructor (refer to Table 6, under the section of content presentation). The information is delivered clearly and the lecturer's explanation has facilitated the students for better understanding. However, there are students saying that they are interested to study Chinese idioms, but the monologue presentation by the lecturer has made them unmotivated as they have to follow the lecturer's teaching paces instead of their own learning paces (refer to Table 6, under the section of motivation). The students also reveal that the stories are hard to be imagined and visualized due to their unfamiliarity of the Chinese history and culture.

5. Discussion

Storytelling fosters better communication as it enables the interaction between the teller and audience (Li, Hew & Choo, 2016). From the results obtained, it can be seen that the use of storytelling has facilitated the non-native novices to study Chinese idioms as well as to enhance their learning interest towards the Chinese language. The non-native novices from the experimental group and the conventional teaching group were motivated and satisfied with their Chinese idiom learning. However, it can be seen that the students of the experimental group have higher learning motivation and greater satisfaction towards Chinese idiom learning than the students of the conventional teaching group. They also achieved higher scores in Chinese idiom test than the non-native novices of the conventional teaching group. In the experimental group, the students have to interact with the MSP to access the Chinese idiom lessons. The interactive buttons allow the students to decide and control their learning paces without proceeding too fast. Thus, the students are able to repeat and recall their learning according to their willingness. In addition, the use of visual elements during the storytelling has assisted the students to visualize and understand the backstory better, especially the circumstance and characters. The narration which is used as an aider in the story description has also made the storytelling vividly and lively. The information is therefore garnered in the students' working memories for a longer time due to the stimulation of visual and auditory senses simultaneously (Mayer, 2005; 2009; 2014).

Although face-to-face communication is allowed in the conventional teaching group during the Chinese idiom lesson, the non-native novices of the conventional teaching group responded as passive information receivers most of the time. Due to the large class size, the lecturer is unable to interact with every student and allow every one of them to ask questions as the lecturer has to complete the teaching syllabus within the given period. The lack of personal interaction between the lecturer and the students has led to less and insufficient intercommunication and learning motivation in the class. Apart from that, the students have to study the contents and listen to the stories according to the lecturer's teaching pace instead of their own. Hence, the

students may encounter learning difficulties if they have missed out any part of the storytelling and lecture unintentionally as they cannot repeat or recall the learning by themselves. For students who are below average level in Chinese language learning, they may also not be able to catch up with the lecturer's teaching pace if the teaching is too fast. This will result in a longer learning curve and less effective learning. Additionally, the students may also confront difficulty of visualization during the storytelling as they are still unfamiliar with the Chinese culture and history. Thus, the students are not able to synchronize their imagination with the narration in their brains during the storytelling.

6. Conclusion

This study aims to enhance the non-native novices' interest towards learning Chinese language and culture through appreciating Chinese idioms by using the developed multimedia storytelling prototype (MSP). An experiment has been conducted to examine the feasibility of MSP and traditional storytelling in teaching Chinese idioms in ordinary classroom. From the investigation, it can be seen that learning Chinese idioms through multimedia storytelling is more feasible and should be recommended to the non-native novices. Storytelling has the ability to deliver messages and information to the audience easily and effectively (Li, Hew & Choo, 2016). Nevertheless, the traditional storytelling is less effective in Chinese idiom learning if compared to multimedia storytelling in this study. An active participant can learn better than a passive information receiver. In order to facilitate the learners to be responsible and work independently during their learning process, motivation and interaction are considered and applied in every instructional method as these elements have prompted the learners to study actively and initiatively. When the learners are successfully changed from passive to active status, they will bear their responsibilities and take the initiative to learn independently. Regarding this, a better intercommunication and understanding can be cultivated, and the learners' motivation will be evoked when they are able to control and decide their learning direction. In addition, the prototype which is developed based on the cognitive theories of multimedia learning (Mayer, 2009) has also assisted the students to learn better as these multimedia instructional principles studied the human cognitive and understand the functionality of brain. The MSP is evident to evoke the learning motivation of the non-native novices in the experimental group successfully as well as to leverage their knowledge and comprehension of the Chinese idioms. Henceforth, the MSP is feasible to be served as a self-learning tool and used by the non-native novices to learn Chinese idioms.

7. Limitation and Future Work

Owing to the small sample of this study, the results obtained from the test and evaluations were regarded as references for Chinese idiom teaching and learning. A bigger scope of samples is suggested for future studies to make the data findings more precise and reliable. In addition, the MSP is planned to serve and act as a complete learning system for Chinese idioms. The system will be improved with other language translations to cater the needs of people from different races. A game-based learning system is also aimed to be integrated into the prototype to facilitate more interaction and communication between the users and learning contents. It is recommended that the enhanced prototype can be envisaged as a new and different approach for the non-native novices to learn Chinese idioms in the near future.

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