

ทัศนคติของนักศึกษาระดับปริญญาตรีต่อการใช้เทคโนโลยี Web 2.0 สำหรับ
การเรียนรู้ภาษาในสถาบันเทคโนโลยีไทย-ญี่ปุ่น

University Students' Attitudes and Awareness towards the Use of Web
2.0 Technologies for Language Learning: A Case of Thai-Nichi Institute
of Technology

พิสิทธิ์ จิตติสุขพงษ์

Pisit Jittisukpong

สำนักวิชาพื้นฐานและภาษา สถาบันเทคโนโลยีไทย-ญี่ปุ่น*

College of General Education and Languages, Thai – Nichi Institute of Technology

smart_ping@hotmail.co.th

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์ 1) เพื่อสำรวจทัศนคติของนักศึกษาระดับปริญญาตรีต่อการใช้เทคโนโลยี Web 2.0 สำหรับการเรียนรู้ภาษาในสถาบันเทคโนโลยีไทย-ญี่ปุ่น 2) เพื่อศึกษารับรู้ของนักศึกษาต่อการใช้เทคโนโลยี Web 2.0 ในการพัฒนาทักษะทางภาษา 3) เพื่อศึกษาเครื่องมือ Web 2.0 ที่นักศึกษาใช้ในการพัฒนาทักษะทางภาษา ประชากรที่ใช้ในการศึกษาของสถาบันเทคโนโลยีไทย-ญี่ปุ่น เป็นนักศึกษาชั้นปีที่ 1 จำนวน 1,200 คน จาก 3 คณะ ได้แก่ คณะวิศวกรรมศาสตร์ คณะเทคโนโลยีสารสนเทศ และคณะบริหารธุรกิจ กลุ่มตัวอย่างที่ใช้ในการวิจัยในครั้งนี้เป็นนักศึกษาชั้นปีที่ 1 จำนวน 219 คน ซึ่งมาจากการตั้งคณะกันในสถาบันเทคโนโลยีไทย-ญี่ปุ่น ที่ลงทะเบียนเรียนภาษาอังกฤษพื้นฐาน ในภาคเรียนที่ 1 ปีการศึกษา 2563 กลุ่มตัวอย่างทั้งหมดไม่ได้เป็นนักศึกษาวิชาเอกภาษาอังกฤษ และได้ถูกเลือกมาโดยวิธีการสุ่มตัวอย่างแบบแบ่งชั้น และวิธีการสุ่มอย่างง่าย ข้อมูลได้ถูกรวบรวมโดยการใช้แบบสอบถาม สถิติที่ใช้ในการวิเคราะห์ข้อมูล ได้แก่ ค่าความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และการวิเคราะห์เชิงพรรณนา

ผลการศึกษาพบว่านักศึกษาได้ตระหนักรู้ถึงการมีอยู่ของเทคโนโลยี Web 2.0 ที่ใช้ในการเรียนรู้ภาษาอีกทั้งนักศึกษายังมีทัศนคติที่ดีต่อการใช้เครื่องมือเหล่านี้ในการเรียนรู้ภาษา นอกจากนี้ทักษะที่นักศึกษาพิจารณาว่าพากษาได้รับการพัฒนามากที่สุดจากใช้เทคโนโลยี Web 2.0 คือทักษะด้านการพั้งท้ายที่สุดเครื่องมือที่นักศึกษาพบว่าพากษาสนใจใช้มากที่สุดในการพัฒนาทักษะทางภาษาคือ YouTube

คำสำคัญ: ทัศนคติ เทคโนโลยีทางการศึกษา Web 2.0 การเรียนรู้ภาษา

Abstract

The purposes of the study were as follows: 1) to investigate the Thai undergraduate students' attitude towards using Web 2.0 tools in language learning at Thai – Nichi Institute of Technology (TNI), 2) to identify their perceptions towards Web 2.0 tools in developing their language skills and 3) to identify which Web 2.0 tools were used by Thai undergraduate students to improve their language skills. The population of the study was 1,200 first year TNI students in three faculties of Engineering, Information Technology and Business Administration. The research samples were 219 first-year undergraduate students who studied an English Foundation Course and came from different faculties at TNI in the first semester of the 2020 academic year. All of the students selected for the study were non-English major students. The sample was selected by using the Stratified Random Sampling and the Simple Random Sampling. The data was collected through a survey questionnaire. Statistics used to analyze the data were frequency, percentage, mean, standard deviation and descriptive analysis.

The result showed that the students in the study were aware of an availability of Web 2.0 for learning language. They held a positive attitude towards these tools, viewing that their skill which was most improved was the listening one. The tool they used most is YouTube.

Keyword: Attitudes, Educational technology, Web 2.0 tools, Language learning

Introduction

The 21st century is known as 'the IT age' with such remarkable developments, not just transforming the social lives of the general public, but also transforming the worlds of business and education who feed on, and create, information and use it for knowledge (Duffy, 2008). Moreover, roles in educational environments, the recruitment of new environments and also requirements with competency are altering quickly. This means that issues of interaction, communication, and other activities can be bettered and the overall success increased (Trilling & Fadel, 2009).

Education is an area that is constantly evolving quickly. With the introduction of the internet, one-way communication was supported through Web 1.0 technology. Web 1.0 was used to define pages that did not interact with the user, but that consisted only of visual elements and text. Web 2.0, also known as 'second- generation technology', replaced 'first-generation technology' or Web 1.0 which had limitations of not allowing content creation and functions of users (Jeng, He, Jiang & Zhange, 2012). Web 2.0 technology is preferred to be used in the field of education because it provides the users with the opportunities of communication, interaction, information sharing, easy access to information, content

creation, content storage and sharing, evaluation, and visualization (Ajjan & Hartshorne, 2008). The advantages of Web 2.0 technology include it is the ease of use in a number of academic areas and its accessibility in terms of study, research and education (Kurt, 2017). The potential of the new technologies is limited when the field of education is taken into consideration (Holzweiss, 2014). Web 2.0 also facilitates the autonomy of the student over their own learning and learning environment while at the same time offering cooperation.

According to Crane (2012), Web 2.0 tools improve students' fluency in listening, reading, speaking, pronunciation and vocabulary. For this reason, Web 2.0 environments used in language learning help students control their own learning according to their own needs (Thomas, 2009). From existing articles on the foreign language learning environment and its usage of Web 2.0 tools, we can list a number of advantages. These include a positive effect on students' motivation, attitude, and self-esteem. Another benefit is an increase of understanding and speed of understanding of targeted language skills and foreign language learning in general (Barrot, 2016). However, it shows that one of the important elements that enable the effective use of educational technology tools and products in learning-teaching environments is the attitude of the user (Grant, 2016). In this regard, it is thought that it is important to investigate students' attitudes towards the use of these technologies and to follow a path according to the current situation. Therefore, the purpose of this study aims to investigate the students' attitudes of Thai undergraduate students towards using Web 2.0 tools in language learning. Additionally, this study attempts to identify the students' perceptions towards Web 2.0 tools in developing their language skills. Finally, this study also aims to identify which Web 2.0 tools are used by Thai undergraduate students to improve their language skills. Last, but not least, this study will be useful for people who get involved with education such as administrators, coordinators, and teachers who help enrich the present educational system.

Research Objectives

The objectives of the study were as follows:

1. To investigate the students' attitudes of Thai undergraduate students towards using Web 2.0 tools in language learning at Thai–Nichi Institute of Technology.
2. To identify the students' perceptions towards Web 2.0 tools in developing their language skills at Thai–Nichi Institute of Technology.
3. To identify which Web 2.0 tools were used by Thai undergraduate students to improve their language skills at Thai–Nichi Institute of Technology.

Research Methodology

Research Design

The present study aimed at investigating the students' attitudes of Thai undergraduates towards using Web 2.0 tools in language learning at Thai–Nichi Institute of

Technology (TNI). Another aim of this study was to identify the students' perception of Thai undergraduate students towards Web 2.0 tools in developing their language skills. The last aim of this study was to identify which Web 2.0 tools were used by Thai undergraduate students to improve their language skills. The study adopted a quantitative research design in order to achieve its objectives. Nunan (2000) stated that the methods used to collect vast numbers of data or, in fact, anything that can be measured is called quantitative research. Also, this type of research is valuable in allowing us to summarize and compare large amounts of data with other materials or research.

Population

The population of the study was 1,200 first year TNI students in 3 faculties of Engineering, Information Technology and Business Administration in the first semester of the 2020 academic year. Research samples were 219 students who enrolled in the English Foundation Course, derived through the Stratified Random Sampling and the Simple Random Sampling.

Research Instruments

The instrument used in this study was a questionnaire. It was developed by the researcher based on university students' attitudes and awareness towards the use of Web 2.0 technologies for language learning. The first part of this questionnaire included demographic information on their genders and faculties. The second part of the questionnaire consisted of items for determining the students' attitudes in using Web 2.0 tools for language learning (1-7). The third part consisted of items for determining the students' perceptions of using Web 2.0 tools in developing their language skills (1-6). The fourth part consisted of items for determining Web 2.0 tools that were preferred by students for language learning (1-7). The questionnaire was evaluated by experts and revised before collecting the data. The research instruments used to collect the data were the questionnaire with the overall value Index of item objective congruence (IOC) at the rate of 1.00.

Research Procedures

After the researcher studied background information and a study of related theories, the questionnaire was designed as a rating scale to evaluate the students' attitudes and awareness towards the use of Web 2.0 technologies for language learning. The first draft of the questionnaire was proposed to five experts for the consideration of the completeness of factors used for the questionnaire and the appropriateness of language used in the questionnaire. After that, the revision was required according to experts' comments and suggestions. Then, the final draft of the questionnaire was conducted in the complete format.

Data Analysis and Statistical Procedures

A descriptive analysis of the data obtained from the attitude questionnaire for using Web 2.0 technologies in language learning was carried out, and mean and standard deviations of the questionnaire items were calculated.

Results

1. The results of the demographic variable of TNI undergraduate students

The analysis of the data from the students' questionnaire reported by TNI students in the 2019 academic year is presented in the 2 section deals with the demographic variables from the students' responses to part 1 of the questionnaire: genders and faculties as the following table.

Table 1. Table of the results of demographic data of respondent

Demographic data of respondents	n=219	Percentage (%)
1. Genders		
1.1 Male	107	48.86
1.2 Female	112	51.14
Total	219	100
2. Faculties		
2.1 Engineering	68	31.05
2.2 Information Technology	79	36.07
2.3 Business Administration	72	32.88
Total	219	100

The table showed that percentages of TNI undergraduate respondents in genders ranged from 48.86% for males and 51.14% for females. For faculties, 31.05% were Engineering students, 36.07% were Information Technology students and 32.88% were Business Administration students.

2. The results of students 'attitude towards using Web 2.0 tools in language learning These results obtained from this study revealed the students' attitude towards using Web 2.0 tools in language learning. The table below demonstrates the percentage, mean and standard deviation of the variable of students' attitude towards using Web 2.0 tools in language learning (see table 2).

Table 2: The results of students' attitude towards using Web 2.0 tools in language Learning

Item No.	Variables	SD	D	N	A	SA	Mean \bar{X}	S.D.
1.	Web 2.0 technology is something that I know exists.	2.74	1.37	19.18	41.55	35.16	4.05	0.92
2.	Web 2.0 technology is something that I know is used.	7.31	10.96	15.33	47.95	18.26	3.59	1.13
3.	Web 2.0 technology is something that I know can be used to learn English.	7.76	0.91	19.18	50.68	21.46	3.77	1.05
4.	Web 2.0 technology is useful for my studies.	7.25	11.10	15.46	47.83	18.36	3.59	1.13
5.	Web 2.0 technology is a good strategy for learning English.	3.20	1.37	25.11	43.84	26.48	3.89	0.92
6.	Web 2.0 technology is something that I believe makes learning more interesting than established traditional methods of learning.	2.28	0.91	28.77	40.64	27.40	3.90	0.89
7.	Web 2.0 technology is something that I believe makes learning more effective than established traditional methods of learning.	2.28	6.39	28.77	44.75	17.81	3.69	0.91
SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: strongly Agree								

As shown in table 2, the results revealed that according to the attitude questionnaire obtained from the students, the item with the highest mean score is ($\bar{X}=4.05$) “Web 2.0 technology is something that I know exists”. Most of the students expressed their opinions on this matter as “agree” (41.55%) and “strongly agree” (35.16%). “Web 2.0 technology is

something that I believe makes learning more interesting than established traditional methods of learning" ($X=3.90$) has been identified to be the item which has the second-highest score in the questionnaire. Most of the students expressed their opinions on this matter as "agree" (40.64%) and "strongly agree" (27.40%). "Web 2.0 technology is a good strategy for learning English" ($X=3.90$) has been identified to be the item which has the third-highest score in the questionnaire. Most of the students expressed their opinions on this matter as "agree" (43.84%) and "strongly agree" (26.48%).

3. The results of students' perception towards using Web 2.0 tools in developing their language skills

These results obtained from this study revealed the students' perception towards using Web 2.0 tools in developing their language skills. The table below demonstrates the percentage, mean and standard deviation of the variable of students' perception towards using Web 2.0 tools in developing their language skills (see table 3).

Table 3: The results of students' perception towards using Web 2.0 tools in developing their language skills

Item No.	Variables	SD	D	N	A	SA	Mean \bar{x}	S.D.
1.	Web 2.0 technology works for the betterment of my reading skills.	7.76	5.48	26.94	45.21	14.61	3.53	1.06
2.	Web 2.0 technology works for the betterment of my writing skills.	7.31	8.68	32.88	38.81	12.33	3.40	1.05
3.	Web 2.0 technology works for the betterment of my listening skills.	2.28	3.20	11.87	41.55	41.50	4.16	0.92
4.	Web 2.0 technology works for the betterment of my speaking skills.	5.02	10.05	19.63	39.73	25.57	3.71	1.11
5.	Web 2.0 technology works for the betterment of my pronunciation skills.	2.28	2.74	18.26	37.90	38.81	4.08	0.94
6.	Web 2.0 technology works for the betterment of my vocabulary skills.	3.20	3.20	11.87	57.08	24.66	3.97	0.89

SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: strongly Agree

As shown in table 3, the results revealed that the item with the highest mean score is “Web 2.0 technology works for the betterment of my listening skills” ($\bar{x}=4.16$). Moreover, most of the students expressed their opinions on this matter as “agree” (41.55%) and “strongly agree” (41.50%). The item with the second highest mean in the questionnaire was found to be “Web 2.0 technology works for the betterment of my pronunciation skills” ($\bar{x}=4.08$). Furthermore, most of the students expressed their opinions on this matter as “agree” (37.90%) and “strongly agree” (38.81%). The item with the third-highest mean was found to be “Web 2.0 technology works for the betterment of my vocabulary skills” ($\bar{x}=3.97$). Most of the students expressed their opinions on this matter as “agree” (57.08%) and “strongly agree” (24.66%).

4. Web 2.0 tools used by the students to develop their language skills

This results obtained from this study revealed which web 2.0 tools are used by the students to improve their language skills (see table 4).

Table 4: Web 2.0 tools used to develop students' language skills

Item No.	Web 2.0 Tool	N	Mean (\bar{X})	S.D.
1.	Video sharing	219	3.57	1.07
2.	Social photo tools	219	3.64	1.07
3.	Social networking tools	219	3.74	1.05
4.	Voice Thread	219	2.77	1.22
5.	Blogs	219	3.68	0.93
6.	YouTube	219	4.19	0.91
7.	Podcast	219	3.01	1.14
Not at all, Not too much, Somewhat, Very, Extremely				

As shown in table 4, the results revealed that the tools used by the students are respectively “YouTube” ($\bar{X}=4.19$), “Social networking tools” ($\bar{X}=3.74$) and “Blogs” ($\bar{X}=3.68$).

Discussion and Conclusions

The findings obtained from the questionnaire showed that TNI students were aware of Web 2.0 technology is something that I know exists ($\bar{X}=4.05$) and Web 2.0 technology is something that I believe makes learning more interesting than established traditional methods of learning ($\bar{X}=3.90$). They believed these tools help them in learning English. This result was supported by Barbara & Linda (2013) who stated that Web 2.0 tools enable students to create their dynamic, creative and flexible learning environments on their own. In these environments, individuals are able to learn and express their ideas in accordance to their own pace and wishes. The result of the research also Web 2.0 tools enhanced students' English listening skills the most ($\bar{X}=4.16$). This result was similar to Chartrand (2012) who agreed that Web 2.0 tools technologies have an important influence on students' listening skills in English. Another result of the study showed that it seems that YouTube ($\bar{X}=4.19$) is the favored medium for learning among students. The theory behind this is that it offers the greatest variety of material and they can find the sources that suit their needs the best and maintain a high level of interest. This result was supported by Duffy (2008) who agreed that the online and offline videos were preferred by learners in listening skills because of the positive effects. Therefore, Web 2.0 technology is cheap, easily accessible and easy to use which makes it invaluable to students. This type of technology should be

used to usher students in their progression of knowledge acquisition due to the constructive benefits of motivation, attitude and didactic issues.

Suggestions

Suggestions for application

These findings may encourage more teachers and educators to consider the adoption of Web 2.0 tools for the purpose of designing courses and classroom activities.

Suggestions for further studies

For further studies in this field, the female and male students' attitudes towards the Web 2.0 tools can be compared in the future studies.

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