

EFFICACY OF WIKIPEDIA AS A PEDAGOGICAL APPARATUS IN THE CLASSROOM

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ABSTRACT

The profusion of the information and communication technology has allowed institution of higher education educators and users to experiment variety of apparatus accessible that can be employed as instructive devices in the classrooms. Wikipedia personifies a fascinating and novel concept which can be used to engage students in authentic collaborative writing activities. This paper provides a description of how Wikipedia was incorporated as a pedagogical means in the ESL settings and reports on the students' attitude and perception on the use of Wikipedia to enhance their L2 proficiency specifically their writing skills. The experience involved the use of wiki technology and the advanced collaborative forms and participative assessment as part of the teaching method. Data was gathered through a survey questionnaire concerning a particular group of transfer students at the tertiary stage. By the means of intended framework and structure, the students carried out several stages of the activities established distinctively for the English subject that they enrolled during the spring semester. The questionnaire was then administered and analysis of data in the signified affirmative responses from the students concerning the use of Wikipedia in the learning activities. The results indicate they perceived that the use of Wikipedia had generally enhanced their L2 skills such as reading and writing, expanded their social circles, improved their communication skills and minimized their apprehension when learning and using the language among their peers. The paper concludes by stressing the advantages that can be attained as a result of the implementation of Wikipedia in language learning contexts and success in attempts to provide such support may depend on: knowledge with wiki technology, vigilant preparation for execution and use, apt class size, and motivation of students to engage in unearthing learning.

Keywords: Wikipedia, L2 learners, pedagogical apparatus, collaborative writing

INTRODUCTION

Wikipedia is a collaboratively written, freely editable online encyclopedia built on a wiki. Wikipedia is a potentially stimulating medium for language learners to both read and write in the target language. Many studies on Wikipedia have focused on the classroom teaching and learning (Workman, 2008; Raman, M., Ryan, T. & Olfman, L., 2005; Every, V., Garcia, G., & Young, M. F., 2010). These are important concerns that Wikipedia is to serve as a reliable information resource and represents something that mostly potentially more exciting than just a form of an online resource. Wikipedia has proven to be a leading source of information which also can serve as an avenue and a platform for university students, specifically, transfer students in the American Degree Program in Sunway University to experience collaborative learning. Even though wikis are novel to the Internet however; it is a practical tool for teaching. This research aims at how academic circles can utilize wikis in their classroom hence enhances and complements the face to face or the conventional teaching as wikis can be utilized and as a unique apparatus in teaching.

BACKGROUND OF STUDY

Online applications such as wikis and blogs are literally very useful for teaching, academic and learning over different areas of learning (Churchill, 2007). A study was carried out to determine the use of Wikipedia as a learning tool in university classrooms and it can be ascertained that through assignments based in Wikipedia, students improved skills in various aspects such as collaboration, critical thinking, expository writing, media literacy, and technology fluency where a project page was created where homework and discussions were directed onto the page. The results of the study indicated that the students' computer literacy increased at a faster pace in comparison to those of similar classes by which the wiki fluency improved before they started their Wikipedia assignment (Schulenburg, F., Davis, L., & Klein, M., 2011). Another study was done to evaluate the use of public wiki in a teacher education program. The initial perceptions on wiki were of a negative and of the disapproving nature. This is mainly due to the students were not given a "head start" as to how to use it in the first place. Upon their initial use, the students showed grave frustration and faced a lot of difficulties. Nevertheless, the students' attitudes change completely and they eventually start to become fond of it where the benefits of public wikis are acknowledged by the students upon the completion of their assessments (Every, V., Garcia, G., & Young, M. F., 2010). As stated by Li, X. X., Chu, S. K. W., Wing, W. K., & Woo, M., (2010), their study was done to explore the attitudes and perceptions of primary students and their teacher toward collaborative writing using a wiki technology in a Chinese writing class in China and it suggested that students developed better writing attitudes after engaging in collaborative writing with wiki. By incorporating wikis into the classroom, educators can better prepare students to make innovative uses of collaborative software tools (Parker, K. R., & Chao, J. T., 2007). According to Coutinho, C. P., & Junior, J. B. B., (2007), a research was carried out to see whether wiki is valid to be used for collaborative learning and the result shows that wikis are relatively easy to use yet they are not popular amongst in the education industry. Furthermore, the result also indicated wikis can be used in various classes and delivers a decent foundation for class discussion around content issues on the wiki because the use of wikis in the classroom provides a special opportunity for collaborative learning (Workman, 2008). In keeping with the use of a wiki to facilitate knowledge management in teaching and learning, a case study by Raman, M., Ryan, T. & Olfman, L., (2005), where the result shows that collaborative knowledge creation and sharing in an academic environment can be sustained by the wikis. Hence, this study is designed to find out how Wikipedia can help students of different backgrounds in a blended learning setting and how it serves as an avenue for the students to improve their proficiency via collaborative learning environment.

STATEMENT OF PROBLEM

Wikipedia has grown tremendously into one of the most utilized referential websites, attracting at least 800 million visitors yearly (Dan Fletcher, D. F., 2009). Wikipedia can be used as a form of a collaborative learning tool where it functions as an avenue for students to share information because Wikipedia offers tremendous and useful medium for collaboration and knowledge accumulation. For instance, everyone can edit the information on the page, brainstorm and collaborate on tasks by adding content to a group website (Revenue, R., 2007). However, academically, Wikipedia is faced with many criticisms on its content. There are certain argumentative issues against Wikipedia due to one of its features where anyone can edit the content hence making it vulnerable to having inaccurate information when users impede incorrect data (Revenue, R., 2007). No doubt that Wikipedia is one of the most trusted websites of obtaining information but to a certain degree, the information is presented in different pages of Wikipedia is not arranged in a proper format or order hence making it

seem like a substandard work (Irfan Naufal Umar & Sajap Maswan, 2004). Another primary problem of using Wikipedia as a source of information is that it doesn't contain information about every topic hence limits its information database (Dan Fletcher, D. F., 2009). Due to all these issues, many academicians cringe at the fact of using Wikipedia in their classroom teaching. Conversely, this research is a preliminary study attempting to gain an insight into the perceptions and attitudes of transfer students towards the utilization of Wikipedia as teaching and learning tools. The main goal of this research is to look at how Wikipedia impacts the students' perceptions and attitudes, how Wikipedia can be exploited as a form of learning apparatus which can aid them in learning English.

LITERATURE REVIEW

Schools of Thoughts on E-Learning and Blended Learning

School of thoughts is demarcated as a combination of a few groups of people that have the same perceptions on a particular topic is known as school of thoughts (Oliver, M., & Trigwell, K., 2005). There were vast of different perceptions on blended learning such as behaviorism, constructivism and cognitivism. Behaviorism states that learning is widely unknowable because different individuals have different perception. But, it explains that "learning is about behavior change", and subsequently different approaches of learning will affect the study modes of an individual (Siemens, 2004). Constructivism mainly describes learning as learners create knowledge in order to understand their experiences (Siemens, 2004). Constructivism also suggested that learners are actively attempting to create meaning rather than as a vessel that filled knowledge. Besides that, according to Siemens (2004), cognitivism described learning as a process to inputs and managing in short term memory and encoded for long-term call. Face-to-face learning is traditional method of teaching and learning consists of lecturer and students in a classroom. This has been practiced and it helps students to improve their social contacts, exchange ideas and the total effort of groups was much more lowly compared to e-learning. According to Al-Huneidi, A. & Schreurs, J., (2011), face-to-face learning enabled students to learn in social interaction environment, reduced the possibility of misunderstanding and facilitated exchange of ideas. However, there were also abundant of disadvantages such as study time is limited in a class, travel time required in order to go to the campus and does not consist of rich resources. Face-to-face learning only allows "limited room for self-directing and student centre learning" (Al-Huneidi, A. & Schreurs, J., 2011).

On the other hand, e-learning is defined as learning and teaching method through technologies available. E-learning enables students to have flexibility on their works with their own pace at anytime and anyplace. According to Tamashiro (2004), research paper, flexibility of time to work was the most frequently nominated advantage to online learning. Furthermore, e-learning saves travelling time to or from colleges, parking hassles, accessible anytime and anywhere, abundant of course materials available and students learn new technologies along with enhanced Internet skills (Tamashiro, 2004). According to Jamlan M. (2004), faculty members at the College of Education have positive opinions toward e-learning where it benefits students, teachers and also learning. This study also revealed other thoughts on e-learning such as save effort and time, rich of knowledge, improved efficiency on teaching and provides greater access to educational opportunities (Jamlan M., 2004). On the other hand, this study mentioned that e-learning does not reduce the team works and collaboration between students. In spite of e-learning provides numerous pros, e-learning also consists of plenty of disadvantages especially lack of social contact between instructor and students. Based on Tamashiro (2004), research findings, the social interaction were the most frequently nominated disadvantage to online learning. Besides that, students sometimes faced

technical problems feeling incomplete and confused, lack of immediate feedbacks and felt isolated.

Similarly, an experiment has been carried out using blended learning to circumnavigate the problem of learner diversity for ESL classroom. Results showed that teachers who used blended learning could increase the diverse needs required by learners. Evidently, “a well-blended learning program should be able cater for the diverse needs of most learners” (Sivapunniam, 2009). The finding affirms self-regulated learning (SRL) that enhances students computing skill and their opinion about blended learning. The result shows that by using “a database management system (DBMS) we obtain five highest scores for five online courses” (Tsai, 2010). Thus, blended learning can improve students’ skill in Microsoft Access. It shows positive result for this study. At the same time students also show their positive perception about blended learning. Classroom time could be used to engage student in sophisticated interactive experiences. Meanwhile, the online portion of the course can offer students with multimedia-rich content at any time of the day, and anywhere with the Internet access. Moreover, a lot of education institutions use collaborative learning as a platform where each member in a team could discuss a problem or issues among themselves, assisting each other understand a concept. For instance, a member may be interpreted as a pair such as small group contains (3-5 subjects), a class more than 30 subjects, a society contains a several thousand or millions of peoples and a community contains a few hundred or thousands of peoples (Johnson. S., 1996). All members in a group are responsible for another’s learning as well as their own. Therefore, the success of one learner helps other member to be successful. Collaborative learning is an idea that learning needs an exchange of idea within a small group and it produces a critical thinking. The exchange an idea gives a member of the group an opportunity to be involves in discussion and thus become a critical thinker. There are several condition elements that included in collaborative learning such as positive interdependent, individual accountability, face to face promote interaction, appropriate use of collaborative skills and group processing (Jeffrey Froyd, 2008). In the collaborative learning environment, the learner has a challenge either socially or emotionally; as we know that they require listening in different perspective and are require improving their idea. Furthermore, learning flourish in social environment requires a learner to take a place in order to make a conversation where during this conversation, a learner creates a framework in order to collaborate.

Henceforth, blended learning is the best proven method to be used for educational purpose. It is solidly proven through the researches that have been done. Blended learning is best way to ensure that students will not lack anything while they are being educated. If only the online method is being used, students who are lack of technology knowledge will definitely be had a hard time to cope because there would not be any proper guidance for them. Also, if only the traditional face-to-face method is being applied, students who are not exactly outspoken will be left out in the activities that are present in class hence through all these researches and points has been made, truly blended learning is very effective and in fact the best proven way for education purposes. A blended learning is a learning process, which uses both face-to-face approaches as well as the computer-mediated approaches to form an incorporated instructional approach.

METHODOLOGY

Participants

There were nine undergraduate American Degree Transfer Program students that participated in the study. All of the participants were from the same class (ENGL 1050: Thought and

Writing) from Sunway University. Among the nine participants, five of them were males and the four were females.

Instruments

Wikipedia page was used as the main tool for the entire study where a webpage is created solely for the purpose of the study. A survey questionnaire was produced which consist of three parts and posted onto the www.surveymonkey.com

Procedure

First, the students were required to debate on “The Pros and Cons of Cohabitation” where the topic was assigned face to face during the normal contact hours. Meanwhile, a Wikipedia page was created by the instructor. Subsequently, the students were required to access into the Wikipedia page and further discuss the assigned topic on the webpage created by writing their thoughts and arguments. Next, the participants were grouped into four different groups and each group was required to brainstorm and seek for answers on the questions which were also assigned face to face where the questions must be answered by all the students via the Wikipedia page created. Table 1 below shows questions that each group had suggested and posted onto the Wikipedia page.

Table 1. Questions posted on Wikipedia

Group 1:	What are the strategies commonly utilized when writing a creative essay? List down the strategies with relevant examples.
Group 2:	Why is it important to use figurative language and provide some examples of figurative language?
Group 3:	In your opinion, what are the most effective methods or techniques of writing a solid introduction for your essay?
Group 4 :	List the facets of fiction and its definitions in detail.

All the participants were required to study in details on the particular topics related in order to attempt the questions posted. Consequently, the survey questionnaire was posted in the www.surveymonkey.com and answered by the participants. Survey monkey is used because it is free and it is also user friendly. The raw data was collected from the website and then analysis on the data was done to. The following shows the framework of the study:

Step 1

A Wikipedia page for ENGL1050: Thoughts and writing is established by the lecturer. Username and password are given to all the students so they are able to log in and edit their works.

Step 2

An informal debate in the classroom was guided by lecturer. A total amount of nine students were involved in the debate about advantages and disadvantages on “cohabitation”. Apart from that, the participants also have to contribute their ideas in Wikipedia. The deadline is given and everyone is needed to contribute to this online website.

Step 3

Nine students were divided into four groups and every group has chosen their own topic. There are 4 topics involved such as Facets of Fiction, Basics or the Fundamentals of Essay Writing, Creative Essay: Strategies and Figurative Language. We need to brainstorm a question for every topic and upload to our class Wikipedia page.

Step 4

The Wikipedia page is printed and evaluated where mark is given based on how much effort the students put in.

RESULTS**Section A: Demographic****Table 2. Demographic Result**

<i>Age Category</i>	<i>Percentage</i>
18 - 20	77.78%
21 - 29	22.22%
<i>Gender</i>	<i>Percentage</i>
Male	55.56%
Female	44.44%
<i>Nationality</i>	<i>Percentage</i>
Malaysian	66.67%
Indonesian	11.11%
Sudanese	11.11%
Ugandan	11.11%
<i>Major</i>	<i>Percentage</i>
Business	44.44%
Communications	11.11%
Engineering	11.11%
Aviation	33.33%
<i>First Language</i>	<i>Percentage</i>
Chinese	44.44%
English	33.33%
Arabic	11.11%
Indonesian	11.11%

Table 2 above shows that the average ages of the students are between 18 and 20 and its percentage is 77.78%. 22.22% shows that the average ages of students are between 21 and 29. Besides that, 55.56% students are male and 44.44% were female. The majority is male. Whilst the Malaysian nationality dominates the classroom by being 66.67%, the remaining 33.33% is shared equally between the students from Sudan, Indonesia and Uganda. Furthermore, 44.44% of the students are majoring in business. While the percentage of students that majoring in aviation is 33.33%. The remaining 22.22% is shared equally between the students that majoring in communication and engineering. Lastly, most of the

students' first language is Mandarin. 33.33% of the students' first language is English. And the remaining 22.22% is shared equally between the students that their first language is Arabic and Indonesian respectively.

Section B: Part I (Attitude and Perception towards Wikipedia)

Table 3. Attitude and Perception towards Wikipedia

	<i>Attitude and Perception towards Wikipedia</i>	<i>Standard Deviation</i>
Strongly Agree	14.81%	16.73%
Agree	46.30%	12.99%
Disagree	31.48%	19.14%
Strongly Disagree	7.41%	5.74%

Table 3 above shows that 61.66% of students have a positive attitude towards Wikipedia; 14.81% strongly agree and 46.30% students generally have a positive perspective on Wikipedia. On the other hand, 38.89% of students have a negative attitude towards Wikipedia; 31.48% disagree and 7.41% students generally have a negative view on Wikipedia. Standard deviation of students that have the positive attitude towards Wikipedia is 29.72%; 16.73% strongly agree and 12.99% agree. However, standard deviation of students have the negative perspective towards Wikipedia is 24.98%; 5.74% strongly disagree and 19.14% disagree.

Section B: Part II (Collaborative Learning ENGL 1050 in Wikipedia)

Table 4. Collaborative Learning ENGL 1050 in Wikipedia

	<i>Collaborative Learning ENGL 1050 in Wikipedia</i>	<i>Standard Deviation</i>
Strongly Agree	11.11%	14.05%
Agree	79.63%	14.77%
Disagree	9.26%	8.36%
Strongly Disagree	0.00%	0%

Table 4 above shows that 90.74% of the students have a positive attitude toward collaborative learning in Wikipedia; 11.11% strongly agree and 79.63% students generally have a positive attitude toward collaborative learning in Wikipedia. In contrast, only 9.26% of the students have the negative perspective toward collaborative learning in Wikipedia. Standard deviation of students that have the positive attitude towards collaborative learning in Wikipedia is 28.82%; 14.05% strongly agree and 14.77% agree. Nevertheless, standard deviation of students have the negative perspective towards Wikipedia is 8.36; 8.36% disagree.

Section B: Part III (Language Learning: Writing Skills in Wikipedia)

Table 5. Language Learning: Writing Skills in Wikipedia

	<i>Language Learning: Writing Skills in Wikipedia</i>	<i>Standard Deviation</i>
Strongly Agree	18.52%	9.07%
Agree	66.67%	14.06%
Disagree	11.11%	14.05%
Strongly Disagree	3.70%	5.74%

Table 5 above shows that 85.19% of students have a positive attitude towards writing skills in Wikipedia; 18.52% strongly agree and 66.67% students generally have a positive attitude perspective on writing skills in Wikipedia. On the other hand, 14.81% of the students have a negative attitude towards writing skills in Wikipedia; 3.7% strongly agree and 11.11% mostly have a negative perspective on writing skills in Wikipedia. Standard deviations of students have the positive attitude towards writing skills in Wikipedia are 24.13%; 9.07% strongly agree and 14.06% agree. Nonetheless, standard deviation of students have the negative perspective towards Wikipedia is 19.79%; 14.05% disagree and 9.07% strongly disagree.

DISCUSSION

Attitudes and Perceptions towards Wikipedia

According to a study that has been done, students assisted by wikis by not only in discovering a fresh subject but as well as sustaining the subject by linking the fresh information obtained with “personal experiences” (Deters, F., Cuthrell, K., & Stapleton, J., 2010). This is one of the reasons to why the amount of the “agree” segment is attaining the highest percentage as compared to the rest with the mean of 61.11% and the standard deviation of 24.88%. In addition, through Wikipedia, based on Li, X. X., Chu, S. K. W., Wing, W. K., & Woo, M., (2010), “the strongest positive correlation was found between perceptions on motivation to write and writing attitudes”. Students are more confident learning through Wikipedia because they are corrected by their own peers or people unknown rather than directly from face-to-face, hence the numbers of students who “agree” are more in amount. Other than getting to learn from one another, the credibility of the information given can be judged by the students, so that, the “overall trust in the system could be escalated”, (Kittur, A., Suh, B., Chi, H. E., 2008). On the other hand, the mean of 38.89% and the standard deviation of 29.72% is the group of students who falls on the “disagree” segment of the pie chart. In 2007, USA Today quoted the Middlebury College stating that, no matter how many “citable source” Wikipedia leads an individual to, citing directly from Wikipedia is disapproved. This is due to the fact that Wikipedia is editable by anyone and everyone just as long as they have an account, which makes them eligible to do so. Furthermore, it is also said that, to conclude a study with Wikipedia cannot be accepted, however, Wikipedia is an epitome to begin a study with (Waters, Neil, 2007).

Collaborative Learning ENGL 1050 in Wikipedia

Collaborative learning in Wikipedia helps students to improve their writing skills by correcting each other’s work. It is mentioned that through Wikipedia, collaborative learning could be applied because the data on Wikipedia can be edited by more than one user, mixture of information are given and a wanted outcome is achievable due to the fact that each and every student can amend one another’s work (Every, V., Garcia, G., & Young, M. F., 2010). It is stated that students do not trust that working in groups have better value as compared to solo works but students do like to work in groups (Pereira, M. C., 2007). 90.74% of students agree that collaborative learning can help to improve their writing skills. This is because students can discuss with their friends about their ideas through their engagement in collaborative learning and this will increase their interest in writing an essay. Researchers say that cooperative inscription with Wikipedia stimulated and attracted majority of the students to write (Li, X. X., Chu, S. K. W., Wing, W. K., & Woo, M., 2010). However, according to Faith Anna Brown’s research, there are a few adverse parts, for instance in gaining a number of students to be involved; struggle occurs (Brown, F. A., 2008). There is a drawback towards collaborative learning which is collaborative is just a waste of time.

Hence, based on the figures on the pie chart, there are 9.26% of students who disagree that collaborative learning can be an assistant.

Language Learning: Writing Skills in Wikipedia

Wikipedia helps to improve learning aspects and the pie chart above shows that the students have positive feedback on Wikipedia and the result shows that Wikipedia can help them to improve their writing skills. A research done states that, “recent learning theories such as constructivism ideas, students tend to have different experiences toward the same context”, (Oliver, M. & Trigwell, K., 2005). All nine students in the English 1050 class have answered the survey questions and the result shows that 70.37% students agree that Wikipedia can help them to improve their language learning specifically in writing skills. Wikipedia helps students to improve their writing skills through collaborative learning in Wikipedia when students correct their peers’ works, their peers will improve their writing skills by referring back on both their mistakes and the corrected version done by their peers. A researcher found that the students who are performing poorly became much better and also “good” and standard pupil reading is being up stretched (Jafar, 2010). Furthermore, Wikipedia can help the weaker students; those students that need more attention from the lecturer compared to the other able ones in their language specifically in writing skills. According to Sivapunniam (2009), an efficient blended learning program would have the capability to provide for the “diverse needs” of the majority number of pupils.

To sum up, based on the data and results which have been collected and compiled, truly Wikipedia can assist to facilitate students’ language learning specifically in writing skills. In spite of results gained, there are 14.81% of students who disagree that Wikipedia can be a form of an assistance or complementary tool in language learning. In 2007, Middlebury School stated that, the exactitude of the gen given is the responsibility of the students; students are answerable. Students are not allowed to indicate Wikipedia or forms of any equivalent “source”, which would occur in time to come to get away from the inaccurate penalties. Moreover, the information that is obtained from Wikipedia is sometimes inaccurate because of the people who edit and put their ideas into the texts. The individuals who insert their point of view, their perception into these Wikipedia texts might not necessarily be professionals and highly credible people, their mentality and knowledge of the subject might be just as broad as the one individual who needs guidance. Hence, there would be a high possibility that the individual who is seeking to learn and be corrected would not be able to improve but only maintain or in fact become worse if one relies on the sources of the Wikipedia by itself. Nevertheless, information obtained from Wikipedia needs to be verify with others sources such as news articles. “Academic reference source” is needed to validate the gen that is attained because Wikipedia is beneficial but not reliable (McGowan, J., 2004).

CONCLUSION

This research paper mainly focuses on the students’ perceptions and attitudes toward Wikipedia and how it affects their writing skills by engaging the students in a collaborative learning environment through Wikipedia. An experiment was carried out; nine undergraduate students in the Thought and Writing class (ENG1050) were recruited and these participants were required to discuss and contribute their thoughts on five different given topics that are related to English writing via Wikipedia. After completing the task, all of the participants were asked to complete a four different survey forms. These survey forms indicate the students’ perceptions on whether Wikipedia truly works as a catalyst on improving students’ English language and catch their attention on learning through blended learning or not. Based on the survey results, it shows that 61.66% of students agree that Wikipedia is a tool of

learning, 85.19% students agree that Wikipedia works as an instrument to improve writing skills and 90.74% students show positive reaction towards collaborative learning through Wikipedia. This result akin to the research findings from Al-Huneidi, A. & Schreurs, J., (2011), blended learning is able to improve students' critical thinking, problem solving skills, analysing, collaborative working and knowledge construction. Blended learning that involves e-learning and face-to-face teaching shows a positive attitude towards learning on the content items (Adam, S. & Nel, D., 2009). In this research paper, only explanations on whether Wikipedia can be used as a tool for blended learning are stated and the providence or explanations on whether Wikipedia can be used as knowledge resource is non-existent. Also, this study does not take sides on the ability of Wikipedia to provide trustable knowledge or sources. In conclusion, positive attitudes and perceptions towards Wikipedia are shown and Wikipedia also works as a tool for improving writing techniques through collaborative learning and e-learning.

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