

# The Development of the Writing Portal (TWP) to Support ESL Pre-Service Teachers' Writing Needs

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## ABSTRACT

This study reports on the 'developmental' phase of an initiative to develop and evaluate a prototype E-learning portal, known as The Writing Portal (TWP) to support the writing needs of English as a Second Language (ESL) pre-service teachers in an institute of teacher education in Malaysia. The portal aspires to complement the five stages of the writing process that students have to embark on in accomplishing their written coursework. The web portal contains categorized links to evaluated ESL resources useful for ESL writing process, and integrates web 2.0 tools such as blogs (as writing database for learners), discussion board, live chat, bulletin boards and vote polls. The design is based on results from the analysis phase conducted earlier on learners' attitudes and preferences, and analysis of content and context. It is also inspired to optimize the benefits that each technological tool could offer. To develop the web portal, an open source web development tool Joomla! 2.5 is used on Windows platform, and all features of the web portal are developed by installing non-commercial plug-in modules available on Joomla! website. All participants are given passwords to gain access to the portal where they are provided with writing tasks to experience and test the usability and functionality of the portal in relation to their writing task.

**Keywords:** E-learning, pre-service teachers, academic writing skills, Web 2.0 tools, personal learning environment

## INTRODUCTION

The Writing Portal (TWP) is a prototype e-learning portal developed with the purpose to provide student teachers in a Teacher Education Institute a way of accomplishing writing tasks via a single web portal. Architectured on the ideas of a Personal Learning Environment (PLE) which recognizes that learning is personal and self-directed, social, open, emergent, and is driven by knowledge-pull (Chatti, Jarke, & Specht., 2010), TWP is designed as a 'one-stop centre' for the pre-service teachers with appropriate tools for academic writing within a flexible and supportive environment. TWP offers various

benefits including access to various reliable ESL resources, a platform for sharing and collaboration, and exposure to web 2.0 technologies which are now highly regarded as a must in education. The portal features eight main sections: (1) links to evaluated free ESL resources grouped into several categories, (2) individual portfolio and public blogs for users as writing database, (3) chat room, (4) forum or threaded discussion, (5) polling, (6) news and announcements to share latest updates, (7) latest activity as a way of looking at users' activities and alerts to the users, and (8) user management system. The 3P model (Chatti *et al.*, 2010) shapes the design of TWP to complement all stages in writing process: planning/pre-writing, drafting, revising, editing and publishing.

## BACKGROUND OF THE STUDY

Teacher education is an integral part of the education system in Malaysia. Tawau Teacher Education Institute is one of many campuses of Teacher Education Institutes under the Ministry of Education which offers training and academic programmes to pre-service teachers, in selected areas such as science education, arts education, special education, remedial education, and physical education since 2007. The programmes range from certificates, diplomas and bachelor degrees. In mid-2010, the institute welcomed its first group of students majoring in ESL education, and two more groups in mid-2011 to complete five years and a half of programme duration.

The unfortunate reality, however, is that the Language Department is faced with several challenges in providing academic support to its ESL students due to lack of resources predominantly insufficient number of lecturers to teach and accommodate students' personal needs, and lack of information resources for students to use to fulfill their academic needs. Earlier studies conducted (Noraini, Caroline & Zilla, 2010; Noraini, Lee & Tan, 2011) based on document analysis of students' written assignments over three semesters and interviews with the Teaching English as a Second Language (TESL) students and instructors at Tawau Teacher Education Institute revealed that most of the student teachers lacked the awareness of free scholarly information available on the internet, published by reputable organizations, universities or publishers. Further probing also revealed that the student teachers:

- relied heavily on the internet for information resources
- used unreliable sources to support their academic writing
- had difficulties in initiating their writing as they did not know where and how to craft their essays
- lacked peer collaboration in performing their writing assignments
- 

The students also reported many challenges when writing, such as being overwhelmed by large volume of information, poor ability to evaluate information and to cite sources, proofreading and editing in writing and many more. When quizzed what might be of help, most students wished to have a one-stop centre or a resource point that

can guide them through their writing process. The language instructors on the other hand suggested that a platform for sharing and collaboration be provided so that students and lecturers can communicate more frequently and effectively.

In response to these challenges, the researchers took the initiative to design and develop an e-portal. The plan was to explore with the use of open-source software, Joomla! and web 2.0 tools to develop a web portal as an integral supplementary platform to engender the development of academic writing skills. In addition to providing useful related external links to free ESL resources and a writing database, the e-portal would enable students to interact with one another via a built-in live chat and forum/discussion board, where individuals could discuss, share ideas, send text messages and e-mail messages. Individual and public blogs would also be created for each student to store, retrieve, create, edit, share and discuss about their writing. This would allow easy storage and access to their writing electronically. To ensure privacy, only students who are registered in the portal could have access to the information and communicate with other classmates. As administrators, we also wanted the portal to be equipped with feeds tools which serve as log files to track user activities. Taking on board all these ideas, The Writing Portal (TWP) was developed based on the instructional design model of ADDIE. The ADDIE model consists of five phases of analysis, design, development, implementation and evaluation. TWP will later be evaluated on its usability, and how it supports collaboration and scaffolding among students in all stages of writing process.

## **OBJECTIVES OF THE WRITING PORTAL (TWP)**

Portal is a gateway that is a major starting point for users when they get connected to the internet or the one that users have a tendency to visit as an ‘anchor site’ that hosts content from multiple web sites (Singh & Mahajan, 2010). In other words, a portal is a framework for a website that brings together information from a variety of sources, and to offer everything under one roof. A web portal can also be defined as a website that aggregates an array of content and provides a variety of services including search engines, directories, news, email and chat rooms. Portals have evolved to provide a customized gateway to web information, where personalization and customization are also possible.

TWP will be a dynamic portal where the content and layout may be subjected to change at any time according to users’ needs, such as the lecturers and students’ needs. The main aim of TWP is to fulfill the writing needs of the ESL students and instructors at Tawau Teacher Education Institute. As such, its objectives are to:

- i. collect, aggregate, and promote the use of reliable ESL resources
- ii. provide support for writing by creating a platform for collaboration and sharing of ideas
- iii. provide easy, reliable access to a variety of disparate information services, and
- iv. satisfy students’ writing needs in a simple, convenient and personalized way

## LITERATURE REVIEW

Research in ESL context is indeed very broad, especially related to technology. Computer-assisted language learning, also known as CALL, is not the only area/discipline that represents the role of technology in language learning, but other areas or concepts such as computer supported collaborative learning (CSCL) (Dillenbourg, Sanna & Fischer, 2009), computer-mediated communication (Handley, 2011), e-learning (Murugaiah & Thang, 2010), web-based learning (Nakamaru; 2011), synchronous learning (Chamberlain, 2010) and asynchronous learning (Peng, 2010) have also contributed to ESL research. The roles of web 2.0 technologies were often featured in most of the mentioned studies, and support for constructivism is apparent where the environments feature constructivist elements such as engaging learners in activities to the discipline in which they are learning; providing for collaboration and the opportunity to engage multiple perspectives on what is being learned; supporting learners in setting their own goals and regulating their own learning; and encouraging learners to reflect on what and how they are learning. However, research on designing and developing web portal to support constructivism is very rare in ESL context, as opposed to other areas such as science education (Othman Talib, Matthews & Secombe, 2005) and educational technology (Wah, 2007).

Research on the use of web 2.0 tools in writing has also been explored. In fact, several doctoral dissertations were found to describe the potential benefits of Web 2.0 in writing. Zhao (2010) explored extensively how YouTube, Google Docs, and blogs can be used in process writing. Another study by Sarieva (2007) using mixed-design examined the use of live chats, e-mail, and electronic bulletin boards in writing process. Journal articles in recent years also show the trend of using web 2.0 in facilitating writing: Steven *et al.* (2008) on tags, blogs and social networking, Arslan and Sahin-kizil (2010) on blogs, Elola and Oskoz (2010), Lin (2011), Pifarre and Fisher (2011) and Woo (2011), on wiki, Brodahl, Hadjerrouit and Hansen (2011) on Google Docs and EtherPad, and Kessler, Bikowski and Boggs (2012) on Google Docs. Other researchers such as Goodwin-Jones (2008) and Bromley (2010) also attempted to describe which web 2.0 tools would be beneficial for writing.

However, most of the studies are either using a single tool, or using multiple tools separately. There is no attempt taken so far to see what would happen if multiple tools are integrated into a single portal to facilitate students to use them to write. This means that students will have a starting point to embark on their writing journey. Nevertheless, recent studies in the last five years, though not in writing specifically, have seen an increasing interest in Personal Learning Environment (PLE). Ebner and Taraghi (2010) described PLE as '*an environment where the distributed resources, tools and applications are all integrated in one platform and customized by the individual learners according to their actual needs*'. PLE itself is not an application, but may be regarded as a concept, or a vision of learning (Chatti *et al.*, 2010). Also characterized with PLE is the use of MashUp concept or the use of several or many tools, existing ones or self-developed, in a single learning environment (Ebner *et al.*, 2011; Ivanova & Alam, 2010; Taraghi, Ebner & Schaffert, 2009).

Many PLE projects especially in higher education have been implemented. For instance, Cann *et al.* (n.d.) reported that in a project undertaken in University of Leicester, a PLE was developed by incorporating Google reader (RSS), delicious (social bookmarking), Google documents (word processing), Flickr and Wordpress/Wikispaces (blogs). In the University of Graz, a PLE was developed by integrating various widgets such as Learning Management System (LMS) widgets, Learning Objects (LO) widgets, Blog widget, Twitter widget, RSS Feed Reader widget, Google Maps widget and USTREAM Widget (Ebner & Traghi, 2010). ELGG, on the other hand, is a PLE software developed by David Tosh. It is a web publishing application that combines weblogging, e-portfolios, and social networking ‘designed to promote learning through sharing of knowledge, conversation, and reflection in a social/academic setting’ (Campbell, Amman & Dieu, 2005).

Sarieva (2007), in her dissertation, contended that most of the research have been focused on revising and editing which are the later stages of the writing process, and there is a limited body of research on the first two stages of the writing process: pre-writing/planning and drafting. Thus, this TWP will attempt to address all stages of writing process by integrating multiple Web 2.0 tools into a single portal. Tool or product development is another area that receives much attention. This is because innovation is really valuable in optimizing learners’ potential and achieving learning goals. In education, ADDIE is probably the most utilized instructional model in the design and evaluation of teaching and learning tools. This model or guideline is based on five stages: Analysis, Design, Development, Implementation and Evaluation. Parsons (2008) found that ADDIE is a standard model used in the development of online learning in higher education in Malaysia. Her study utilized Delphi techniques in getting instructional design experts in higher education regarding the best practices in instructional design. Wang (2011) developed an online instructional sequence for a culinary art programme using ADDIE. The researcher employed a quasi-experimental design for the study. Another researcher, Singh (2009) also used ADDIE to develop a web-based course for the teaching and learning of metacognitive strategies. Therefore, TWP will also be developed based on the same guidelines.

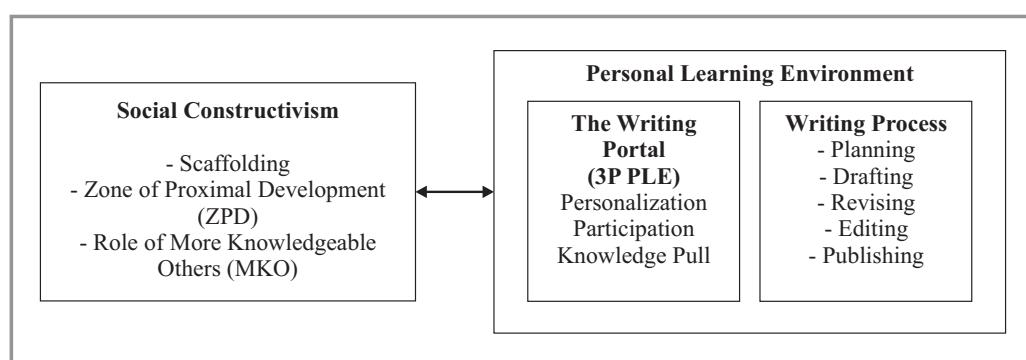
## THEORETICAL FRAMEWORK

Web 2.0 applications have the great potential to engage and involve learners with technology in learner-centred and collaborative learning environments and encourage the active participation of learners (Chiou, 2011). Therefore, social constructivism best fits as the theoretical framework of this study as it draws on social context such as interactions, collaborations and role of communities for learning to occur. The founder of the learning theory, Vygotsky believed social interaction was an integral part of learning, along with cognitive, dialogue, culture, inner speech, and the zone of proximal development (Mathis, 2011). Using the concept of zone of proximal development (ZPD), Vygotsky highlighted the role of ‘more capable others’ (MKO) in facilitating

learning process. The idea of the leap forward in learning with the help of a “more knowledgeable other” (MKO) is a useful one to explain a difficult process, and allowed the idea of a scaffold for learning. Peña-López (2012) brings Vygotsky’s ideas right up to date, arguing in his blog themed “Personal Learning Environments and the revolution of Vygotsky’s Zone of Proximal Development” that a PLE can take the place of the MKO, extending the ZPD significantly.

In the development of TWP, scaffolding is given due thoughts during the planning and design stage of the portal. According to Kebaetse (2010), scaffolding is an instructional strategy in which the external support is provided to the learner in person or through artifacts to enable achievement of learning goals and tasks within the zone of proximal development until the learner can independently perform the task. In TWP, the use of scaffolding will be seen in the use of external links to evaluated ESL resources to provide a starting point to students. Besides, students will also be provided a platform for collaboration with peers and lecturers to help with their writing until they can finally write independently. The role of peer feedback/review, and collaborative writing, be they individual, pair work or group work (Brodahl *et al.*, 2011) will be main elements of TWP. Students’ writing journey will be guided by the single portal, TWP throughout the five stages of writing process. In short, social constructivism, through its basic premise of learners’ development through social interactions, is pivotal as collaboration is introduced in the study and serves as framework for the design of TWP, which is hoped to induce students’ participation and learning in writing.

The three main principles in a learning model that a Personal Learning Environment (PLE) should ideally be based on forms the overarching framework of the TWP, i.e., personalization, participation, and knowledge pull (Chatti *et al.*, 2010). According to Chatti *et al.* (2010), personalization should occur for the learning experiences, by taking into account learner differences. Participation, on the other hand, puts the learner at the centre of PLE, not just by being part of the group or community, but establishing personal knowledge network (PKN). Finally, knowledge pull approach is by giving learners the opportunities to access to various types of knowledge resources. The figure below shows the framework of this study.



**Figure 1** Research framework

## TWP ARCHITECTURE

The portal is developed using Joomla! (a free Content Management System), and installed on a local host. It is an open-source software and has great community support that is beneficial especially for developers with minimal technical knowledge. The portal is not hosted yet as it is still under the development stage. Development is possible as it is offline-enabled, and there are non-commercial modules or plug-ins that support the functions of Web 2.0 tools made available in Joomla! community. Below is the screenshot of TWP that is still under development, but already plugged-in with most planned features such as feeds, chat and polling. A snapshot of the TWP is shown in Figure 2.



**Figure 2** A full-view snapshot of TWP

## TWP DESIGN AND CONTENTS

TWP comprises of three-column layout, using a free Joomla! CSS template, to avoid clutter and enable simple design. The Writing Portal is divided into seven main sections as the following:

- i. External links to evaluated ESL resources: links to information about online journals, books, theses and dissertations, which are freely available on the web and grouped into eight categories. All of these resources were evaluated based on set criteria adapted from (Calkins & Kelley, 2007) such as credibility, accuracy, relevance, support and free. In addition, the list is also approved by the Subject Matter Experts (SMEs) at the study setting. Figure 3 shows the snapshot of how the links are presented in the portal:



**Figure 3** A snapshot of links in the online journals category

The number of links and the number of categories may increase or reduce depending on users' request and suggestions. Some of them are discussed below:

- Online database: Under this category, a total of ESL databases are included. Some of the important databases are:
  - ERIC ([www.eric.ed.gov](http://www.eric.ed.gov)) – a database where articles, research papers, and other documents pertaining to education are stored and retrieved.
  - ProQuest Open Database (<http://pqdtopen.proquest.com>): a database that offer access to free journals in ProQuest
- Online Journals: Under this category, links to journals in ESL available in the public domain are given.
  - Asian EFL Journal ([www.asian-efl-journal.com](http://www.asian-efl-journal.com))
  - ESL journal ([www.esljournal.org](http://www.esljournal.org))
  - Internet TESL Journal (<http://iteslj.org/>)
  - Directory of Open Access Journals ([www.doaj.org](http://www.doaj.org)). This link covers free, full-text and scholarly journals in all subjects and languages. There are thousands of journals in the directory.
  - SAGE free journal (<http://ldq.sagepub.com/content/34/3/208.full.pdf+html>)
- Online Theses and Dissertations: Students may want to look at samples of academic writing which is essential in their studies.
  - University Malaya Repository of Theses (<http://dspace.fsktm.um.edu.my>)
  - South Florida University (<http://scholarcommons.usf.edu/etd/>)
- E-books, Magazines and Newspapers: facilitates access to thousands of books that are freely readable over the internet.
  - E-books by Bartleby (<http://www.bartleby.com/>)

- Online newspaper (<http://www.onlinenewspapers.com/>)
- Internet Public Library (<http://www.ipl.org>)

e. Online dictionaries: links to great online dictionaries for students to use.

- ESL dictionary (<http://esldictionary.org/>)
- The Free Dictionary (<http://www.thefreedictionary.com>)
- Merriam-Webster Online Dictionary (<http://www.merriam-webster.com/dictionary>)

f. Grammar and Writing Resources: links to support for writing mechanics, style, grammar, and proofreading.

- Types of Writing (<http://www.kidskonnect.com/subject-index/20-language-arts/350-writing-styles.html>)
- Essay Writing (<http://esl-voices.com/writing-lab/essay-writing/>)
- Purdue Online Writing Lab (<http://owl.english.purdue.edu/owl/>)
- Writing Lab ([http://annex.ncwc.edu/writing\\_lab/ncwc/esl.htm](http://annex.ncwc.edu/writing_lab/ncwc/esl.htm))
- Grammar Editor (<http://ed.grammarly.com/editor/view?f=1>)
- Grammar Editor (<http://bonpatron.com/en/>)

g. Citation Styles: resources to guide students in citing resources accurately and appropriately.

- Basics of APA style (<http://flash1r.apa.org/apastyle/basics/index.htm>)
- MLA style (<http://www.docstyles.com/library/mlalite.pdf>)
- Citation Generator ([www.citefast.com](http://www.citefast.com))
- Citation Generator ([www.citeforme.com](http://www.citeforme.com))
- Web Evaluation: Guides to help students evaluate internet resources.
- Evaluating Internet Resources (<http://eduscapes.com/tap/topic32.htm>)
- Web evaluation (<http://www.multcolib.org/homework/webeval.html>)
- Writing Database: Every registered user gets his or her individual and personal Weblog. The users will also be able to view, edit, comment, store and retrieve the writing that they have done. Two features are provided such as individual portfolio and public blog. For individual portfolio, users have the options whether or not to share their writing, while public blogs allow everyone to access them. Both features are comments-enabled, which means users get to post their insights and thoughts about the piece of writing. Figure 4 shows how writing database is featured in TWP.

ii. Forum/ Threaded Discussion: This asynchronous technology will offer flexibility and opportunities for registered users to post questions or raise issues pertaining to different issues sort into categories. They also get to suggest other links/suggestions for the improvement of TWP. Snapshots of the forum are shown in Figure 5.

iii. Chat: This synchronous feature will allow users to engage in conversation in real time regardless of topics. This feature is very simple and is hoped to attract users with the use of emoticons as shown in Figure 6.

**Writing DB Menu**

> Writing Database

- Create New Draft
- Individual Portfolio
- Public Blog

**Writing Database: Sample Writing in Individual Portfolio**

Portal Home Page

Title	Author	Display #	Hits
My Draft 1	Written by Student1	8	

> Writing Database

- Create New Draft
- Individual Portfolio
- Public Blog

testing2

Posted By Student1 On Tuesday, August 28, 2012, 2:00 AM

testing2

Like | Sign Up to see what your friends like.

testing

Posted By Student1 On Tuesday, August 28, 2012, 1:58 AM

testing 123

Like | Sign Up to see what your friends like.

Test Blog

Posted By Administrator On Tuesday, August 28, 2012, 1:54 AM

Test Blog

Like | Sign Up to see what your friends like.

**Writing Database: Sample Writing in Public Blog**

**Writing Database: Writing Editor**

Editor

Title \*

Alias

Save Cancel

B I U AaC [ Styles Paragraph

Path: p

Article

Image

Page Break

Read More

Figure 4 Snapshot of writing database and its features

**Forum Menu**

> Forum

- Forum
- Index
- Recent Topics
- New Topic
- Replies
- My Topics
- Profile
- Help
- Search

**Forum: User's Individual View**

Index Recent Topics New Topics No Replies My Topics Profile Help About

Recent Discussions

There are no posts in this category.

Topics

Month Board Configuration

Who is Online

Recent users online: 10 Members and 0 Guests. Online

Admins: 1 Guests: 0

Writing Portal Forum Forum Statistics

**Forum Statistics according to Categories and Users**

Writing Portal Forum Forum Statistics

General Statistics

Total Users	Latest Member	Join Date
8	arrin	2012-08-28 10:45:26
Total Messages	Total SubTopics	Total Discussions
4	3	1
Today Online	Yesterday Open	Today Total Answered
0	0	0
Yesterday Total Answered	Yesterday Total Post	Yesterday Total User
0	0	0

Most Popular Topics

Subject	Posts
Welcome to IJELP	1
Grammar Problems	1
Reference Problems	1

Most Active Posters

Username	Posts
student1	1
notaini	1
ramydy	1

Who is Online

Figure 5 Snapshot of forum/ discussion board



**Figure 6** Snapshot of chat

iv. Latest Activity: This tool enables users to see recent activities in the portal such as edited articles. It will also serve as the log files of users' activity which will serve as data for this study. The log files will also be generated in the administrator panel as shown in Figure 7.

 A screenshot of the 'Latest Activity' section in the administrator panel. It shows a list of recent activities:
 

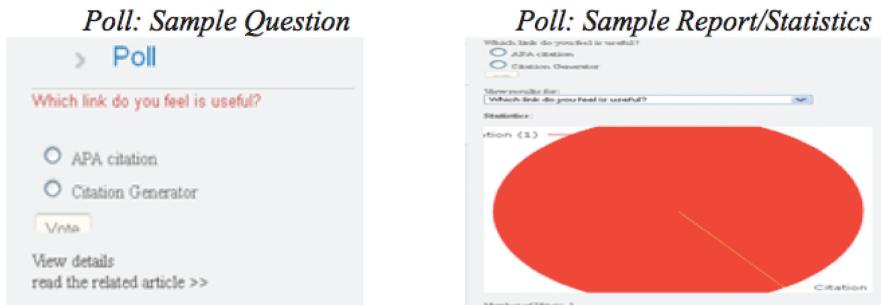
- NEWS & ANNOUNCEMENTS: News & Announcements 18-08-2012. Welcome to the Writing Portal! This portal is intended to offer continuous help and support to ESL students especially in accomplishing writing tasks. Since this portal is still in the development...
- WRITING & GRAMMAR: Writing & Grammar 1 18-08-2012. Grammar and Writing 5 Writing Styles <http://www.kadekconnect.com/object/index/20>

 To the right, there is a 'Last 5 Logged-in Users' section and a 'Top 5 Popular Articles' section. The 'Top 5 Popular Articles' table is as follows:
 

Popular Items	Created
Citation Style 1	2012-08-18 02:59:22
TESL Resources 1	2012-08-18 03:08:20
My Draft 1	2012-09-09 02:24:15
Online Journals 1	2012-08-18 03:23:19
Writing & Grammar 1	2012-08-18 03:17:35

\*\*Only viewable in *administrator's* panel

**Figure 7** Latest activity and log file



**Figure 8** Snapshot of poll in TWP

- v. Polling: This feature will be used to get users' opinions on improvement / suggestions related to TWP (Figure 8).
- vi. Important Toolbar: Figure 9 shows the snapshot of toolbar that contains icons and links to sites and services that students are attracted to such as Facebook, Twitter, RSS feeds, MySpace, Google Bookmarks, Google Plus One and LinkedIn.

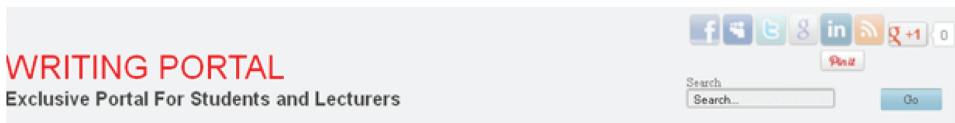


Figure 9 Important toolbar

- vii. Login Form: A login form is also created so that some features are only accessible to registered and approved users as the portal is still under development, and also to give some kind of privacy to students are still new to the portal. The administrator can create user accounts manually or users can create their own by clicking on the button as in the following snapshot (Figure 10).



Figure 10 Snapshot of the login form/ create account for users

## TWP AND WRITING PROCESS

TWP is targeted to complement all stages of the writing process. Table 1 shows how each feature in TWP can be used in respect to each writing stage. (The table does not imply the nature of writing process as linear, as it should be recursive. Table 1 will only illustrate how TWP can complement each stage in the writing process)

One feature that is not included in Table 1 is news/announcement as it will be used and updated by the lecturer/administrator of TWP to inform the users of any special news. The latest activity function is notable in each stage as it will alert all users of the other users' activity without having them to check each user's profile individually.

**Table 1** The use of TWP in the writing process

Writing Stage	Activity	TWP Features	Description
Planning/ Pre-writing	Generating ideas Locating and evaluating information	i. External Links to Evaluated Resources ii. Forum / Threaded Discussion iii. Chat iv. Polling	Users may want to search for information to generate ideas from various sources. They may also discuss their ideas using forum and chat, and give opinions on the links that they have visited
Drafting	Writing and organizing ideas	i. Individual Blog/Public Blog ii. External links to Evaluated Resources iii. Latest Activity	Users can start drafting and upload it to their blog. They may also want to check how citation can be done properly. Proper use of vocabulary can also be assured if they use online dictionaries.
Revising	Revising the drafts in terms of idea development, organization, and writing style. Collaborating with peers or instructors	i. Individual Blog/ Public Blog ii. Forum/ Threaded Discussion iii. Chat iv. External Links to Evaluated Resources v. Latest Activity	Users may invite others to comment on their writing, or ask questions on how to improve their writing in terms of ideas, structure and organization.
Editing	Editing content to meet the conventions/standard	i. External Links to Evaluated resources: ii. forum/ Threaded Discussion iii. Chat iv. Individual Blog/ Public Blog v. Latest activity	Users may want to proofread their writing using grammar editor, or having their mistakes pointed out by their peers.
Publishing	Publishing	Individual Blog/ Public Blog Latest Activity	Users can upload their final draft on their blog, and decide whether it is for private or public access

## CONCLUSION

At present, TWP is still in the development phase. It will soon be implemented with the students to try out the functionality of all tools and links in the portal. Following that, an evaluation phase will be carried out. The evaluation phase includes analyzing qualitative and quantitative data elicited via formative and summative evaluation from all participants. Qualitative data include textual analysis of online discourses, interviews, log files of participants and reports generated by the portal on user activity. The data will be useful in providing evidence of whether the use of the portal really meets the ideals

of Social Constructivism, which essentially inspires the design of the portal. Log files/ user activity report will be used to track students' activities with the intention to see whether they are making full use of the links provided. Online discourses on the hand will yield rich data on the types of support that students/users give or need, and evidence of collaboration in the accomplishment of writing process. Quantitative data include findings from a number of questionnaires adopted from literature which are given to learners in analysis and evaluation phase, and also other participants involved in this study. TWP is hoped to address all stages of writing process and contribute to the gap in writing research. In addition, with the integration of web 2.0 tools in TWP and alignment with important theoretical background, TWP will be beneficial to students especially in providing them with support in accomplishing written tasks.

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