SCAFFOLDING AN EFL (ENGLISH AS A FOREIGN LANGUAGE) ‘EFFECTIVE WRITING’ CLASS IN A HYBRID LEARNING COMMUNITY

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KEYWORDS

Hybrid learning community, pedagogy, productive, quasi-transcendental, receptive, reciprocal, self, transcendental scaffolding.
Scaffolding an EFL (English as a Foreign Language) ‘Effective Writing’ class in a hybrid learning community

ABSTRACT

This study sought to establish and develop innovative instructional procedures, in which scaffolding can be expanded and applied, in order to enhance learning of English as a Foreign Language (EFL) writing skills in an effective hybrid learning community (a combination of face-to-face and online modes of learning) at the university where the researcher is working. Many educational experts still believe that technology has not been harnessed to its potential to meet the new online characteristics and trends. There is also an urgency to reconsider the pedagogical perspectives involved in the utilisation of online learning systems in general and the social interactions within online courses in particular that have been neglected to date.

An action research design, conducted in two cycles within a duration of four months, was utilised throughout this study. It was intended not only to achieve a paradigm shift from transmission-absorption to socio-constructivist teaching/learning methodologies but also to inform practice in these technology-rich environments.

Five major findings emerged from the study. First, the scaffolding theory has been extended. Two new scaffolding types (i.e., quasi-transcendental scaffolding and transcendental scaffolding), two scaffolding aspects (i.e., receptive and productive) and some scaffolding actions (e.g., providing a stimulus, awareness, reminder, or remedy) for EFL writing skills in an effective hybrid learning community have been identified and elaborated on. Second, the EFL ‘Effective Writing’ students used the scaffolds implemented in a hybrid environment to enhance and enrich their learning of writing of English essays. The online activities, conducted after the F2F sessions most of the time, gave students greater opportunities to both reinforce and expand the knowledge they had
acquired in the F2F mode. Third, a variety of teaching techniques, different online tasks and discussion topics utilised in the two modes bolstered the students’ interests and engagement in their knowledge construction of how to compose English-language essays. Fourth, through the scaffolded activities, the students learned how to scaffold themselves and thus became independent learners in their future endeavours of constructing knowledge. Fifth, the scaffolding-to-scaffold activities provided the students with knowledge on how to effectively engage in transcendental scaffolding actions and facilitate the learning of English writing skills by less able peers within the learning community.

Thus, the findings of this current study extended earlier understandings of scaffolding in an EFL hybrid learning environment and will contribute to the advancement of future ICT-mediated courses in terms of their scaffolding pedagogical aspects.
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<tr>
<td>CALL</td>
<td>Computer-Assisted Language Learning</td>
</tr>
<tr>
<td>CSCL</td>
<td>Computer-Supported Collaborative Learning</td>
</tr>
<tr>
<td>EFL</td>
<td>English as a Foreign Language</td>
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<td>ELT</td>
<td>English Language Teaching</td>
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<td>ES</td>
<td>Expert Scaffolding</td>
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<tr>
<td>F2F</td>
<td>Face-to-Face</td>
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<td>GLoCALL</td>
<td>Globalisation and Localisation in CALL</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>INHERENT</td>
<td>Indonesian Higher Education Network</td>
</tr>
<tr>
<td>L1</td>
<td>First Language</td>
</tr>
<tr>
<td>L2</td>
<td>Second Language</td>
</tr>
<tr>
<td>LCD</td>
<td>Liquid Crystal Display</td>
</tr>
<tr>
<td>LMS</td>
<td>Learning Management System</td>
</tr>
<tr>
<td>MKO</td>
<td>More Knowledgeable Other</td>
</tr>
<tr>
<td>MOODLE ®</td>
<td>Modular, Object-Oriented, Dynamic Learning Environment</td>
</tr>
<tr>
<td>PAOR</td>
<td>Planning, Acting, Observing, Reflecting</td>
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<tr>
<td>QTS</td>
<td>Quasi-transcendental Scaffolding</td>
</tr>
<tr>
<td>RS</td>
<td>Reciprocal Scaffolding</td>
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<tr>
<td>SS</td>
<td>Self-Scaffolding</td>
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<td>TS</td>
<td>Transcendental Scaffolding</td>
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<td>TELL</td>
<td>Technology Enhanced Language Learning</td>
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<td>UPH</td>
<td>Universitas Pelita Harapan</td>
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<td>ZPD</td>
<td>Zone of Proximal Development</td>
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STATEMENT OF ORIGINAL AUTHORSHIP

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: _________________________

Date:   01/03/2010
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CHAPTER ONE: INTRODUCTION

Online learning is gaining popularity in academic circles and educational landscapes are changing rapidly to meet the rising demands for online classes. In addressing this issue, Waterhouse (2005) mentions three factors which may explain why online learning is rapidly rising: the proliferation of inexpensive personal computers, the widespread availability of Internet connections, and dramatic improvements in software tools for creating online learning resources.

Embracing this technology in education has led to both opportunities and challenges in the classroom (Aggarwal, 2003; Nelson, 2008). On one side, technology may bring new learning experiences while on the other, unexplored challenges may also exist. Thus, for example, Holmes and Gardner (2006) express their concern that “online learning is unquestionably the major ‘mission critical’ in educational systems the world over and is likely to remain so for the foreseeable future” (p. 1). This concern indicates that online learning is still open to possibilities for improvement in various areas because it needs to accommodate the latest developments in the ever-changing technology used to support it (Caladine, 2008).

In this study, three main areas were addressed. First, a hybrid learning environment–a combination of both face-to-face (F2F) and online learning in an Indonesian context–was investigated as an alternative means for offering online courses at a university level. When this study was conducted, implementing the hybrid (F2F and online) learning environment was a strategic solution because the online infrastructure was in its early stages of development and the academic community–both students and lecturers alike–were not really familiar with this new learning style, bringing mixed feelings of insecurity to its use. Second, this study explored the use of scaffolding to
provide a more actively engaged hybrid learning community in an English as a Foreign Language (EFL) ‘Effective Writing’ class at the university. As online learning provides flexibility in time and place (Aggarwal, 2003; Cashion & Palmieri, 2002; Shank, 2008), the scaffolding processes provided in this academic setting may help students make sense of the knowledge which they are constructing as a learning community. Finally, this study attempted to look into possibilities of how, according to Holton and Clarke’s (2006) concepts, scaffolding can be further expanded to guide students to reach their learning objectives and become independent learners in their future learning experiences.

This chapter outlines the background of the study, its rationale, the research questions, methodology, the study’s significance and its limitations.

**Background of the study**

Since online learning is a relatively new and emerging domain (Chin & Williams, 2006; Conole & Oliver, 2006), the terminology used to describe it is changing, contested and often imprecise. Accessibility to the Internet enables people of different backgrounds throughout the world to freely propose their ideas about online learning. As a result, a range of terms and definitions are used to describe online learning such as web-based training, Internet-based training, e-Learning, advanced distributed learning, and distance education (Beaudoin, 2006). They include, *inter alia*, educational technology, learning technology, Communication and Information Technologies (C&IT), and Information and Communication Technologies (ICT) (Conole & Oliver, 2006). However, in this study, the term *online learning* is used to refer to the use of online technology, the Internet, to support teaching and learning activities (Zhang & Nunamaker, 2003) and also to the online components of the hybrid learning situation adopted in this study.
Since 2000, there has been a high uptake of this new technology from universities due to the potential of online learning (Corich, Kinshuk, & Jeffrey, 2007; Herron & Wright, 2006). More institutions are introducing or incorporating it into their educational strategic planning and day-to-day teaching and learning operations (Caladine, 2008). Much of this can be attributed to the increased availability of the Internet and the World Wide Web (Caladine, 2008; Koontz, Li, & Compora, 2006). Online learning has become common-place not only in higher education but in the K-12 environments as well and, as a result, online course offerings spanning all kinds of disciplines (Palloff & Pratt, 2007a) and across various sectors of society (Lock, 2007) are being developed.

Many consider that online learning is one of the most effective, economical and productive ways of delivering instruction by corporations, institutions, colleges and universities (Demiray, 2007). However, this trend towards increasing use of online learning should be tackled cautiously and appropriately if an educational institution, like a university, is to compete with others to strive for excellence in providing quality education to the whole nation by discovering and creating new knowledge, preserving and disseminating knowledge and applying knowledge to solve social problems (Levine, 2003).

*Online learning developments throughout the world*

In the United States, data collected by Gagné (2005) regarding the growth of online learning indicates that in 2002, more than 350,000 students were enrolled in online degree programs, which generated an income of $1.75 billion in tuition revenues for the institutions. The data showed an increase of 40% and predicted that over the coming years there could be more than 2.3 million students utilising online learning in their search for knowledge. The same trend was also occurring in industrial and...
governmental sectors. Revenues in both sectors had grown at approximately 50% every year, expecting to reach a figure of $750 million by 2005. Based on the number of people who can log on to the Internet, there seems to be an expectation that technology will influence education, serving as an agent of change (Kwok-Wing, 2005).

Similarly, countries in Asia like Singapore, Taiwan, Korea, Hong Kong, and mainland China have all made significant technology investments. Rickards (2003) found that Vietnam is also trying to improve the provision of effective technology-based infrastructure. Each of these countries has made plans for the future of Information and Communication Technology (ICT) in education as evidenced by their education department websites and each deems effective use of technology-rich learning environments as pivotal in the development of their country. Without doubt, the desire to improve technology-rich educational learning environments is becoming a priority at the government level for many countries.

Lynch (2004) also indicates that even in countries with poorer economies (e.g., many African countries, India and Sri Lanka, and much of Latin America), the Internet has become a key ingredient in economic growth and education. Many of these countries have been given assistance to build the computing infrastructure needed to support Internet commerce and education.

This indicates that technology is being used by both rich and poor countries to enhance learning as well as economic sectors and that it is believed to play a major role in its contribution to positive developments in all sectors and that further developments with respect to Internet-based reforms are still in progress (Chang & Fisher, 2003; Hill, Raven, & Han, 2007; Soekartawi, 2008b).
Online learning developments in Indonesia

Online learning reforms similar to those reported in other developing countries are occurring in Indonesia. The use of online technology within Indonesian educational institutions is still relatively new but it is becoming more popular in Indonesian universities (Jalal, 2008; Soekartawi, 2004; 2008b). Within Indonesian universities, the Universitas Terbuka (Open University), the Universitas Petra, and the Universitas Bina Nusantara have been the three forerunners in adopting this online technology. These three universities have decided to apply hybrid modes to enhance their teaching-learning activities. However, when the utilisation of online learning in these three universities is compared with universities in the neighbouring countries such as Malaysia, Thailand, the Philippines, and Singapore, or with universities in advanced countries, it is quite evident that the optimal use of online technology has not yet been reached in Indonesia (Soekartawi, 2004).

Recently, the INHERENT (Indonesian Higher Education Network) program, launched in 2006, has changed the landscape of online learning in Indonesia by providing teleconferences among its members, and by connecting eighty-two public universities and 252 private universities within the twelve regional offices of the Coordinator for the Private Higher Education Institutions all over Indonesia (Jalal, 2008). With this program in place, the members can present online learning conducted at one particular university and at the same time the teleconference can also be accessed by the other members, forming a larger audience, discussing the same issue.

This INHERENT program can be found in the following website: http://www.inherent-dikti.net/. As this program is further developed to reach more participants, more Indonesian universities are expected to become involved in this mega
project (Irwandi, 2008). According to Jalal (2008, p. 16), the topology of INHERENT is illustrated in Figure 1.1 below.

![Figure 1.1 Topology of INHERENT](http://www.ehef-jakarta.org/web/images/ALSpresentations/P3_Fasli_Jalal.pdf)

Soekartawi (2008a) mentions three national objectives for using online technology such as INHERENT in higher education in Indonesia, namely to provide all higher education institutions, its faculty and students with opportunities to learn the use of ICT, to electronically link institutions of higher learning and libraries, and to make maximum use of ICT in learning. With such objectives, improved infrastructure, and the commitment of the decision makers in all aspects, online programs in Indonesia should flourish and improve significantly.
Extent of Internet availability

Since the Internet is the main tool for online learning, and is believed to have driven the success of online learning (Caladine, 2008; Koontz et al., 2006), this section examines its availability world-wide. According to Internet World Statistics (2009), many parts of the world are now connected by the Internet and the numbers are increasing, as illustrated in Figure 1.2.

![Internet users in the world by geographical regions](https://www.internetworldstats.com/stats.htm)


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*Figure 1.2 Internet users in the world by geographical regions*

What is worth noticing in Figure 1.2 is what has been happening in Asia. Asian countries have been using the Internet quite extensively, reaching over 650 million users. Figure 1.3 below depicts the Internet users in the top ten Asian countries, with China as the leader, reaching a number of 298 million users. Figure 1.3 also provides more specific information concerning Indonesia which occupies the fifth position, with an approximate number of 25,000,000 users.
The data presented in Figures 1.2 and 1.3 also indicate that online activities are becoming more prevalent and as the needs to be connected are increasing, online activities are no longer considered as a luxury but a necessity because more opportunities are provided to gain easy access to the Internet (Sheldon, 2008; Soekartawi, 2004). Furthermore, this level of Internet access has made it possible to present online educational programs to different individuals from all walks of life, and it is now a fact that the Internet has been part of their everyday lives (Soekartawi, 2004).

Some other statistics related to the Internet usage and population statistics can be found in Table 1.1, which indicates that in the year 2000, there were only 2,000,000 users in Indonesia. In 2001, it was estimated that there were approximately four million Internet users in Indonesia and this grew to over 11.2 million in 2004, and an estimated sixteen million in 2005 (Soekartawi, 2004). As also shown in Table 1.1, two years later, the number increased to 20,000,000 users, and reached a number of 25,000,000 people.
by 2008. This shows a significant increase in the use of the Internet in the everyday lives of the Indonesian people. Soekartawi (2004) concurred that the general public had come to see the Internet as something indispensible in their daily activities.

Table 1.1

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Users</th>
<th>Population</th>
<th>% Pen.</th>
<th>GDP p.c.*</th>
<th>Usage Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2,000,000</td>
<td>206,264,595</td>
<td>1.0 %</td>
<td>US$ 570</td>
<td>ITU</td>
</tr>
<tr>
<td>2007</td>
<td>20,000,000</td>
<td>224,481,720</td>
<td>8.9 %</td>
<td>US$ 1,280</td>
<td>ITU</td>
</tr>
<tr>
<td>2008</td>
<td>25,000,000</td>
<td>237,512,355</td>
<td>10.5 %</td>
<td>US$ 1,925</td>
<td>APJII</td>
</tr>
</tbody>
</table>

Note: Per Capita GDP in US dollars, source: United Nations Department of Economic and Social Affairs.
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Based on the data presented here, it becomes clearer as to why the right time for educational institutions in Indonesia to use the Internet to support their online courses has more than arrived. Technology has been appealing to both students and lecturers. Furthermore, this online learning is likely to flourish in the twenty-first century because the vehicle utilised to deliver instruction (i.e., the Internet) will continue to evolve in innovative ways (Koontz et al., 2006; Palloff & Pratt, 2007a).

However, relying on technology alone is not sufficient because it is simply a tool to reach an end. As a result, sometimes online learning may not be effective especially if the students’ main intention is not to learn but only to complete a course (Davies, 2006). This implies that merely providing quality instructional materials, online or otherwise, may not be enough to foster learning (Davies, 2006). Consequently, the process of reaching the end is more important in a learning context. Sound pedagogical principles
need to be considered and implemented within an online learning environment to serve as a driving force to facilitate and nurture online learning (Driscoll, 2008; Palloff & Pratt, 2007a).

**Context for the research study**

The study was conducted in the context of ‘Effective Writing’ Courses in the English as a Foreign Language (EFL) program at Universitas Pelita Harapan (UPH) located in Karawaci–Tangerang, (Indonesia). In order to keep up with the advance of technology in education, the Universitas Pelita Harapan (UPH) has developed and implemented online learning programs. UPH started to adopt some online learning programs in 2005. In the same year, UPH also established its ICT Department specifically to support the university with its online learning programs. However, since online learning at UPH was still in its infancy, there was still much to do to perfect the online learning framework. For this reason, the inclusion of an instructional design model such as that being designed, implemented and evaluated in this research study in UPH’s latest pedagogical strategic planning has the potential to improve the teaching-learning processes significantly as a whole within the university. In the following sections, a brief history of online learning at UPH is presented.

*Online learning at Universitas Pelita Harapan (UPH)*

With the improved level of technology accessibility, UPH has adopted the concept of ‘hybrid learning’ throughout the university as its online policy. This decision was made because studying online was a totally new teaching mode for both the lecturers and students, providing new ways of teaching and learning that go beyond the traditional constraints of time and place (Shank, 2008). With the introduction of the hybrid mode, the students were expected to be more familiar with the new emerging technology while
at the same time they were introduced to some new ways of learning. The online activities were initially aimed at providing more reinforcement of student learning. Sharma and Barrett (2007) mention that the use of technology in the context of hybrid learning is intended for complementing and enhancing F2F teaching. They also believe that the hybrid mode of learning also enables lecturers to enrich their courses by providing more flexibility and access to materials which traditional classes could never make possible. With this hybrid learning mode, UPH aimed to provide further opportunities for students to facilitate their own knowledge construction.

**Phases of online implementation**

There were two phases involved in the development of online learning at UPH to its current level. The first phase was carried out in the 2005-2006 academic year and the second phase was implemented in the beginning of the 2007 academic year.

*First phase: (2005-2006)*

The application of online learning at UPH was not implemented straight away in all classes offered within one semester. Three factors had to be taken into consideration. The first factor was related to the human resources required to support both lecturers and students. The students and lecturers needed to be equipped with the technology if the teaching-learning processes were to take place effectively. There were several training sessions for both lecturers and students. The software called “Breeze Macromedia” was introduced initially. Then, both the lecturers and students were also encouraged to attend training to use the tablet PCs effectively. Training for lecturers in making and uploading PowerPoint® presentations for online learning was also conducted separately.

The second factor was related to material development. In terms of the material development, in the first semester of the 2005-2006 academic year, there were only five
hybrid classes offered in each department. The following hybrid classes were offered in the Department of Languages and Literature: three classes for the core units, namely, ‘Structure 1’ (two credits), ‘Reading 1’ (two credits), and ‘Introduction to Writing’ (two credits); and two classes for General Subjects like ‘State Ideology’ (two credits) and ‘Effective Learning’ (two credits). In the second semester of the 2005-2006 academic year, there were also five hybrid classes offered in each department. The following classes were offered in the Department of Languages and Literature: three classes for the core units, namely: ‘Structure 2’ (two credits), ‘Reading 2’ (two credits) and ‘Effective Writing’ (two credits) and two classes for General Subjects like ‘Leadership’ (two credits) and ‘Character and Attitude’ (two credits). During that time, the university continued to expand the hybrid courses offered. The summary of the hybrid courses can be seen in Table 1.2 below.

Table 1.2
Summary of the hybrid courses

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Structure 1 (2 credits)</td>
<td>Structure 2 (2 credits)</td>
</tr>
<tr>
<td>Reading 1 (2 credits)</td>
<td>Reading 2 (2 credits)</td>
</tr>
<tr>
<td>Introduction to Writing (2 credits)</td>
<td>Effective Writing (2 credits)</td>
</tr>
<tr>
<td>State Ideology (2 credits)</td>
<td>Leadership (2 credits)</td>
</tr>
<tr>
<td>Effective Learning (2 credits)</td>
<td>Character and Attitude (2 credits)</td>
</tr>
</tbody>
</table>
The third factor was related to the infrastructure used to mediate the content delivery. In its initial stages, the university installed many relay transmitters throughout the campus, to strengthen the WiFi signals. The speed to allow fast WiFi connections had also been improved significantly enabling fast wireless connections. The current bandwidth available for accessing wireless connections is 100Mbps. Consequently, both students and lecturers are now able to access the portal with ease wirelessly anywhere on campus.

It was evident that the online activities during the first phase were mainly concerned with uploading and downloading teaching materials from the sites. At this stage, the online approach was mostly technology-driven, focusing more on the technology to deliver the instruction. This provided the context for the researcher to conduct research in the area and to determine the effectiveness of the hybrid mode and to discover ways to improve it.

Second phase: (2007- present)

In the second phase, MOODLE®--an open-source Learning Management System (LMS)--was introduced. Many kinds of training such as ‘Basic MOODLE ®’, ‘Intermediate MOODLE ®’, and ‘Advanced MOODLE ®’ were provided to lecturers and students were encouraged to participate in some training to familiarize themselves with tablet PC and MOODLE ® applications. The ICT department continued to provide such kinds of training, usually on an ‘as needed’ basis upon requests from each department at UPH. Lecturers were also encouraged to design MOODLE ®-based materials to be used in the teaching-learning activities. This was being done to boost the use of MOODLE ®-based hybrid courses throughout UPH.
With MOODLE®, the focus on pedagogy can be identified. MOODLE® was essentially developed to foster the need to construct knowledge within a learning community (Dougiamas & Taylor, 2003). This can also be demonstrated by the modules available in the software.

*Learning Management Systems (LMS’s) adopted at the English Department at UPH*

Two Learning Management Systems are used in the English Department, namely: TappedIn® and MOODLE®. Each has its own advantages and disadvantages. TappedIn® is simpler to operate than MOODLE® because TappedIn® provides fewer facilities for online interactions. MOODLE® provides more comprehensive online facilities. This has posed another problem in using MOODLE® in the teaching-learning activities. Most lecturers have been discouraged by its sophisticated technical features.

*TappedIn®*

When the researcher commenced this study in Semester II of the 2006-07 academic year (January–May 2007), the online platform, called MOODLE®, was not up and running. As a result, TappedIn®, which is also an online open source LMS, was used. TappedIn® facilitates the formation of an education community of practice, “providing opportunities and mechanisms for teachers of all levels to overcome their isolation and make more effective use of time spent on professional growth” (Fusco, Gehlbach, & Schlager, 2000, p. 1). TappedIn® can be accessed via the following link: http://tappedin.org. This open source only provides minimum facilities for online classes such as discussion forums, chat sessions, whiteboard, and file downloads. In spite of these minimum facilities, the research study could be carried out to its maximum potential because many relevant, important and rich online data such as the chatting transcripts, and archived threaded discussions could be gathered along the way.
MOODLE®

During Semester I (2007-2008): August–December 2007, the university was ready to implement its online courses via MOODLE®, which can be accessed via http://pulse.uph.ac.id. MOODLE® has been used as the main platform to offer online courses ever since. This online platform has been designed to meet the demands of delivering online programs based on constructivist learning concepts (Dougiamas & Taylor, 2003). Its infrastructure supports many types of plug-ins (e.g., activities, resource types, question types, data field types, graphical themes, authentication methods, enrolment methods, and content filters), all of which support effective and efficient online activities.

The UPH hybrid ‘Effective Writing’ course

The ‘Effective Writing’ course, which was a two-credit unit, was a writing-skills course offered in the second semester where the students were expected to write well-organised five-paragraph essays, consisting of an introductory paragraph, three paragraphs as the body and a concluding paragraph. This course was delivered entirely in English as a Foreign Language (EFL) with a duration of one hundred minutes for each session. There were seventeen sessions altogether within one semester, including the mid-term test and the final test. This writing course was the continuation of the ‘Introduction to Writing’ course presented in the first semester, where the students were expected to write single-paragraph essays, consisting of a topic sentence, supporting details and a concluding sentence, all of which are written within seven to fifteen sentences.

This course was presented using a hybrid mode (both face-to-face and online). Each of the one-hundred-minute session was carried out in the classroom every week.
The exposure to online activities, which accompanied the face-to-face mode, was intended to reinforce or expand the students’ knowledge. In this case, they were given ample opportunities to construct their knowledge personally and socially.

The researcher recognised that online learning is a relatively young field of research (Chin & Williams, 2006; Conole & Oliver, 2006). There is still an urgent need to establish a strategic and systematic prototype in instructional designs to better support online learning. Hence, an investigation, in this study, into the effective use of scaffolding to create a conducive hybrid learning atmosphere is much needed and may become a unique concept of online learning which can be applied at UPH, especially in the hybrid EFL ‘Effective Writing’ course offered at the English Department. The research outcomes derived from this study also should be applicable to other courses offered at UPH.

**Research aims and research questions**

The main aim of this study is to establish and develop innovative instructional procedures in which scaffolding can be expanded and applied in order to enhance social interactions in learning EFL writing skills in an effective hybrid learning community at the university where the researcher is working. In addition, there is also the need to determine and improve practice and understanding of the relationships between scaffolding and effective teaching of writing. The scaffolding concepts investigated in this study are framed around Holton and Clarke’s (2006) theory of scaffolding.

In order to deal with the research aims, three categories of questions have been formulated, as follows:

1. Questions addressing the issues of scaffolding:
• How can Holton and Clarke’s theory of scaffolding be implemented to enhance social interactions in an effective hybrid learning environment to teach in an EFL writing class?

• How can Holton and Clarke’s theory of scaffolding be extended to further enhance learning in a hybrid learning environment to teach in an EFL writing class?

2. Questions addressing the problems encountered in a hybrid learning environment:

• What sorts of problems may occur when a hybrid learning community is conducted for the first time for both the students and lecturers?

• What sorts of interventions can be offered to solve the problems?

3. Questions addressing the issues of social interactions:

• What sorts of activities can be used to get the students engaged in the hybrid learning community?

• What sorts of online social interaction activities might emerge while applying the scaffolding processes?

**Overview of methodology**

An action research design with two cycles was chosen to be used in this research because this research was conducted in a higher educational setting where the researcher was involved as a full-time lecturer. The researcher also aimed at improving the existing condition at the time when the research was conducted. Furthermore, the results of the research could be applied immediately in the teaching-learning environment because the
researcher was part of the learning community itself, which is one of the many advantages of action research (Stringer, 2007).

**Significance of the study**

This study has both theoretical and practical significance.

*Theoretical significance*

The theoretical significance comprises two interrelated aspects. First, more evidence is needed to further research the scaffolding concepts proposed by Holton and Clarke (2006). Second, in relation to scaffolding, there is a need to make the students aware that there has been a shift in the emphasis from “learning by the individual” to “learning as part of a community” (Kilpatrick, Jones, & Barrett, 2003). In many cases, like most Asian students who prefer to learn by themselves with little or no assistance from the lecturers (Wong, 2004), Indonesian students prefer to study alone, because since they were young, they have been introduced to such a learning style. Rote learning seems to be emphasised over the development of critical thinking skills in their learning efforts (Guerin, 2006) and this has become the cultural habit in studying for many years (Lengkanawati, 2004) although efforts to move to a student-centred approach have been established (Education Development Centre, 2006). Wong (2004) further mentioned that Asian students believe they learn better when the information is given by the lecturers. The same case also occurs in Indonesia, where students prefer to be taught by their lecturers rather than share information with their peers or learning from other sources. This is common practice on all levels of educational settings in Indonesia.

With the scaffolding processes, the students will be guided to acquire different learning styles which cover personal and social types of learning. They should be
reminded that it is not always necessary to believe that learning should only occur in isolation. Rather, it is now suggested that learning can also be a social transaction of knowledge.

Practical significance

The practical significance of the study covers three areas. First, a new framework of studying online effectively and efficiently through scaffolding and constructivist pedagogy is offered. Its prospective challenges and engagement patterns are anticipated and monitored. This surely brings significant impact to online learning in the Indonesian context. As Reiser and Dempsey (2002) mention, there is very little high quality empirical literature to support the contribution of instructional design to effective and efficient instruction. Besides, pedagogical issues may also contribute to unsuccessful learning when neglected (Christie & Ferdos, 2004; Driscoll, 2008).

Second, the importance of social interaction couched in the use of scaffolding methods and use of learning communities to encourage student engagement in learning is established. According to Muilenberg and Berge (2005), when it comes to barriers to online learning, the idea of ‘social interaction’ is second from the top in a list of the eight greatest barriers to online learning. This clearly indicates that there exists an urgent need to remedy the current situation (Coates, 2006; Hannon & D'Netto, 2007; Koontz et al., 2006; Palloff & Pratt, 2007b; Richardson & Newby, 2006; Robinson, 2006; Sims, 2003; Yanes, Peña, & Curts, 2006).

Third, in dealing with a paradigm shift from traditional to modern ways of online learning, new skills are required in order to function effectively in online programs (Salmon, 2004). The new types of skills are explored to enhance the teaching and learning practices with the UPH context.
Scope and limitations

The scope of this study covers two specific areas: the type of writing class and the scaffolding concepts employed throughout the study. This study was conducted in the ‘Effective Writing’ classes at the English Department at Universitas Pelita Harapan (UPH), Lippo Karawaci, Indonesia. This ‘Effective Writing’ was a subject which was offered for first-year (B.A. equivalent) students in their second semester of the 2006-07 academic year (January–May 2007).

The theory of scaffolding employed throughout the study was the one specifically offered by Holton and Clarke (2006), particularly in terms of its agency, which consists of three elements: expert, reciprocal and self-scaffolding. Further implementations of the scaffolding processes were applied to investigate how the scaffolding theory could be expanded and used to enhance the hybrid ‘Effective Writing’ classes.

In terms of the limitations, the following aspects were carefully monitored to maintain validity of the study so that the results could reflect what was happening in the study. The first limitation was related to the data analysed. Although different kinds of data were collected, most of the data analysed in this study were collected and based on the online interactions occurring in both the chat sessions and discussion forums as they provided authentic materials to be analysed. Moreover, these data could be easily revisited as necessary because they were archived online. Some relevant data collected from other sources, such as the classroom observations, interviews, and questionnaires were used to support the main online data.

The second limitation was that the researcher in this study was also one of the lecturers of the ‘Effective Writing’ classes. Although the researcher was involved in the
research, he always tried to be neutral in the data analysis by aggregating or triangulating the data from different sources and as a result, drawing the theories can be established from the data aggregation or triangulation. In this way, the validity and reliability of the data could be sustained (Hesse-Biber & Leavy, 2006; Johnson, 2005).

The final limitation was linked to the students’ language proficiency. English was used throughout the study and the students in this study were the first-year students in the 2006-2007 academic year. At that time, they were still in their early years of studying English, so that their command of English might not be perfect but it was sufficient enough to make themselves understood as English was used as a medium of communication in an EFL setting.

**Overview of the thesis**

This thesis is structured as follows. Chapter One introduces this study by setting up its background, followed by the rationale of the study which addresses how this study intends to be conducted. The research questions are formulated and a short overview of the methodology is presented. The limitations are also discussed, followed by an overview of the thesis. It concludes with a short summary.

Chapter Two reviews the literature related to the current theories underpinning some EFL methods, EFL writing and the use of technology, and learning communities within EFL context. The scaffolding concepts and how they can be used to support online learning are discussed in detail. The conceptual framework, which is specifically designed as an approach to be carried out in this study, is offered at the end of Chapter Two, together with some relevant theories discussed as they relate to the improvement of knowledge construction. A short summary concludes this chapter.
Chapter Three presents the research methodology that provides the necessary tools for conducting this study. First, the rationale of the research design is presented and the Action Research characteristics are discussed, followed by the descriptions of the participants and instruments. The two cycles are described in detail because they are the most important parts of this Action Research design. The data analysis strategies are presented and a short summary concludes this chapter.

Chapter Four provides the observations and reflections on the two cycles of the action research design. The two cycles are described in detail, together with the emerging themes which were drawn after the theory building of each cycle. The summaries of the changes implemented after cycle one are presented to provide a better context of the research activities. It concludes with a short summary.

Chapter Five discusses the data analysis and findings of this study. The theories of scaffolding which have been revisited are expanded. The progress from scaffoldee to scaffolder is presented. The evidence of some scaffolding actions which emerged in the research is discussed extensively. Six vignettes concerning knowledge construction through scaffolding are discussed in detail. The social interactions in the eight small groups are explored. A short summary concludes this chapter.

Chapter Six concludes this thesis. It addresses the research questions formulated in Chapter One. The theoretical and practical significance of scaffolding in this study are presented. Some limitations concerning the participants, duration of the study and technology are also described and some recommendations for further research are proposed. Some concluding remarks follow.
Chapter summary

This chapter outlined the key aspects developed to provide a rationale of conducting this study. The background of the study involving the online developments throughout the world and in Indonesia has been described and the context of online learning at UPH was also explained in detail. The research questions covering the three categories were formulated carefully. The methodology was explained briefly and the significance of the study, covering the theoretical and practical significance, was presented. The scope and limitations to the research were also discussed. In the next chapter the literature review will be presented.
CHAPTER TWO: LITERATURE REVIEW

This chapter presents a review of the research literature relevant to this study. It is sub-categorised into the following sections: definitions of EFL, EFL methods and the trends in the teaching of EFL skills with their limitations and problems, the use of online technology for EFL writing, effective online learning, hybrid learning communities, scaffolding concepts, rationale for using Holton and Clarke’s scaffolding theory, scaffolding to support online learning and the proposed conceptual framework. It concludes with a summary.

Definition of EFL

According to Gebhard (2006), EFL can be defined as the study of English by people who live in places in which English is not used as a means of first language communication. He further indicates that in such a setting, the students have few chances to be exposed to English for communication outside the classroom. A similar definition is expressed by Harmer (2007) who defines EFL as the teaching of English where the students are studying English in their own country or are engaged in short courses conducted in English-speaking countries such as the United States, Britain, Australia, Canada, Ireland, or New Zealand. A third definition is suggested by Camenson (2007) who indicates that EFL students may live in a country where their own language is primarily spoken for communication and that these students may be required to learn English for their academic studies, for travelling activities to an English-speaking country, or for business purposes. He also further stated that EFL students only spend a few hours per week studying English, have little exposure to English outside the classroom, have little opportunity to practise their newly-acquired language skills, and have a native language background in the classroom (Camenson, 2007).
In the study of English in EFL contexts, some cultural aspects in the target language may not be naturally acquired (Brown, 2001; Cotterall & Cohen, 2003). As an example, EFL is taught in Japan, Morocco and Thailand (Brown, 2001) and other countries like Italy, Saudi Arabia, and Vietnam (Gebhard, 2006). This is also the case for English teaching in Indonesia (Carrell, Prince, & Astika, 1996; Exley, 2005; Hoven & Crawford, 2001; Novera, 2004). Therefore, in this study, EFL is defined as the study of English by non-native speakers living in a non-native environment and possibly taught by non-native speakers of English who may not be proficient in dealing with some cultural values inherent in the target language.

**EFL methods**

To be an effective EFL lecturer, it is necessary to know some EFL methods used in EFL settings. Today’s EFL world is considered to have reached the “postmethod condition”, which means that practically no new methods have been discovered and discussed recently and, as a result, language teachers only modify methods or incorporate them with other well-established methods or pedagogies to support their teaching contexts (Kumaravadivelu, 2006). However, in this section, the literature on EFL methods will be reviewed briefly to provide a context for the literature reviewed in the following sections.

Kumaravadivelu (2006) has classified three major streams in EFL methods: language-centred methods, learner-centred methods and learning-centred methods. The language-centred methods such as the “Audio-lingual Method” (See Richards & Rodgers, 2001; Rivers, 1981), which were implemented in the early EFL settings, focus more on the linguistic forms. Since the language is considered important, the students are required to know the linguistic forms. The proponents of these methods believe that the
process of language learning is linear and additive because the linguistic forms are introduced in a particular sequence, namely from easy to difficult.

The learner-centred methods, for example “Communicative Language Teaching” (See Richards & Rodgers, 2001; Rivers, 1981), were a critical response to the language-centred methods. They treat language as having to take consideration of the learners’ needs, wants and situations. The learners, as the central aspect of learning, are provided with the learning atmosphere to develop themselves through meaning-focused activities so that they can improve the language form and function in order to be able to communicate outside the classroom. The advocates of this method aim at making language learners grammatically correct (form) and communicatively fluent (function). However, the language learning process is still deemed to be linear, incremental and additive because the learners are still carefully guided to gradually master the skills step-by-step.

The learning-centred methods such as the “Natural Approach” (See Richards & Rodgers, 2001), represent more current EFL methods and provide opportunities for the language learners to participate in open-ended meaningful interactions. Through problem solving activities, meaning-making will lead to target language mastery while at the same time the learners can absorb their still-developing “inter-language” (Richards & Rodgers, 2001)–an emerging linguistic system experienced by a Second Language (L2) learner who has not become fully proficient in the target language–to achieve linguistic as well as pragmatic knowledge. With these learning environments, unlike the other two previous methods, the language learning processes are more incidental than intentional, referring to a non-linear process. For example, grammar construction may take place when the learners pay attention to the process of meaning-making, even if they are not
focusing on the formal properties of the target language. As a result, there is no need to pre-sequence systematic language inputs. Alternatively, there is a need to create conditions in which the students become engaged in meaningful activities. Carefully scaffolding their learning activities as implemented in this study may provide part of the solution, while outside the scaffolded areas, the L2 learners are still open to chaotic creativity, an environment where the learners construct their knowledge in a non-linear fashion.

In terms of scaffolding L2 learners, many Learning Management Systems (LMS) are available and can now be used to foster online teaching and learning activities. In the context of this study, LMSs can also be used to support current EFL education due to their flexibility and powerful properties which meet the nature and challenges of the learning-centred methods. Both the learning-centred methods and LMS technology share the same characteristic in perceiving that learning is non-linear. The online materials presented in the LMSs may be organised as hypertext, which is different from how information is presented in a printed publication (Clarke, 2008).

*Trends in the teaching of EFL skills*

In this section, two important issues concerning the trends in the teaching of EFL skills are discussed: integration of EFL skills and orientations in EFL writing.

*Integration of EFL skills*

There has been a shift from ‘discrete’ to ‘integrated’ in teaching the language skills in EFL settings. In the past, the language skills were taught as discrete skills or separate segments of a curriculum, covering the listening, speaking, reading and writing skills (Brown, 2001; Weigle, 2002). With the disconnection of the skills, the students were not really exposed to the real situations where people were engaged in real communication
with one another, incorporating the four skills (i.e., reading, listening, speaking and writing) in their day-to-day lives. Rather, the students learned the skills separately as discrete items.

In recent years, however, there have been movements to integrate the four language skills: reading, listening, speaking and writing (Harmer, 2007; Kroll, 2001; McDonough & Shaw, 2003; Richards & Renandya, 2002). The whole language approach, “an approach to learning that sees language as a whole entity” (Richards & Rodgers, 2001, p. 112), has initiated such a movement (Brown, 2001). With the new techniques of integrating the four language skills, the students can be exposed to the teaching-learning atmosphere, representing what is happening in a real life situation and conditions where everything is integrated, not segregated (McDonough & Shaw, 2003). In this case, all elements of the four language skills are learned simultaneously. This, alternatively, also reflects a richer learning environment.

The application of these integrated skills to teach writing has been adopted in this study. It is better to focus on teaching writing, with the other skills functioning as add-ons to enhance and reinforce what has been acquired in the writing class. In this way, it can offer the students different kinds of activities. The process of writing is not dedicated to writing only but other optional activities such as presentations, class discussions, online debates, and finding related sources online can be derived and carried out not only to avoid boredom but also to provide a variety of teaching techniques. In these integrated environments, the students are exposed to real-life situations (McDonough & Shaw, 2003).
Orientations in EFL writing


The product approach focuses on the students being able to produce correct textual forms, based on the models provided by the lecturer. In this orientation, writing is considered as a linguistic act. As the name suggests, the learners are expected to produce the end products, the process of which seems to be ignored. Experts who are in this stream believe that as long as the learners can produce well-structured compositions with good grammar at the end of the sessions, they are considered to be successful in their learning (Brown, 2001). This product approach is much likely to be influenced by the development in language-centred methods, which emphasised more on linguistic forms.

The process approach, on the other hand, places more emphasis on the individual students, achieving the four basic stages of writing: planning, drafting, revising (or redrafting) and editing (Harmer, 2007). The process of writing is discursive, and its order is not linear. In this orientation, writing is considered as a cognitive act and the students are monitored closely in the process of writing up their compositions. As indicated previously, they experience different stages in finalising their work because the process of producing well-structured compositions at the end of the program is highly emphasised. This process approach is apparently much influenced by the development in learning-centred methods, where the conditions for learning are non-linear.
Unlike the product and process approaches, the genre-based approach pays more attention to the social context (Widodo, 2006). Accordingly, writing is not only a linguistic and cognitive activity but it is also a social act. As a social act, the students are encouraged to present their writing to a particular audience in a particular context with a certain purpose. Successful communication in writing is because of some understanding of genre, which represents a type of written organisation and layout recognised by the members of a discourse community because the community members share the same language customs and norms (Harmer, 2007).

For this study, these three orientations were combined and then introduced and applied in the hybrid learning community (See Table 2.1). However, the overall focus was on the process approach, where the students were advised to plan, draft, revise, and edit their writing, with special attention given to the end-products in the forms of well-organised writing with accurate grammar and correct formats. In order to consider the purpose of writing for the intended audience, to whom the writing would be dedicated, the genre-based approach was also implemented. The three orientations introduced in the study posed challenges for the students to improve their writing skills.

Table 2.1

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<thead>
<tr>
<th>EFL writing orientations applied in the study</th>
<th>Treatment of writing</th>
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<tr>
<td>Product approach</td>
<td>Linguistic act</td>
</tr>
<tr>
<td>Process approach</td>
<td>Cognitive act</td>
</tr>
<tr>
<td>Genre-based approach</td>
<td>Social act</td>
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Language difficulty

Writing in the first language is already challenging for many EFL students (Rivers, 1968). EFL writing students encounter even greater challenges if they are requested to produce a piece of writing in English because they need to express themselves with the syntactical and rhetorical devices of a language which they are still learning (Zhu, 2002). Celce-Murcia (2001) states that “the ability to express one’s ideas in writing in a second or foreign language and to do so with reasonable coherence and accuracy is a major achievement; many native speakers of English never truly master this skill” (p. 205).
Anokye (2008) concurs, stating that “writing is unlike any other academic skills in the sense that it is not something that necessarily gets easier with time” (p. 65). Brown (2001), together with Richards and Renandya (2002) also support this assertion because the skills involved in writing are complex. The students, learning a second language (L2), have to allocate their attention to two different aspects, namely the lower level skills such as spelling, punctuation, or word choice and the higher level skills such as planning, and organising. The two aspects are similar to what McDonough and Shaw (2003) introduce concerning the levels of writing. They offer four different levels, namely:

- Handwriting, spelling, punctuation
- Sentences, grammar, word choice
- Paragraphs
- Overall organisation

These four different levels provide a complex challenge for the students to master. It has been documented in the literature from Rivers (1968) to Anokye (2008) that EFL writing does pose a particular difficulty for EFL students, due to its complexity. The problems can be more complex with second or foreign language learners if their language proficiency is still inadequate because they are still at the “inter-language” stage (Richards & Rodgers, 2001). Olshtain (2001) mentions that “linguistic accuracy, clarity of presentation, and organization of ideas are all crucial in the efficacy of the communicative act, since they supply the clues for interpretation” (p.207).

Influence of L1 (First language)

The next challenge is related to the influence of L1. Brown (2001) proposes that in their initial stages of language development, the students are influenced by their L1 as
writing is a culturally-influenced activity (Cotterall & Cohen, 2003). So, it is common for EFL learners to use L1 sentence constructions in their L2 (Second Language) end-products. This condition is termed as “interlingual transfer” (Brown, 2001), which is a major source of error for all learners. The early stages of learning a second language are particularly susceptible for “interlingual transfer” from the native language or interference (Brown, 2001).

Differences between L1 and L2 writing

Another obstacle closely related to the influence of L1, is that there are differences between L1 and L2 writing. L2 writers do less planning and use fewer words. They are less accurate and less effective in stating their goals and organising material. There are also differences in using appropriate grammatical and rhetorical conventions and lexical variety (Harmer, 2007).

Authenticity

The fourth challenge is related to authenticity in the EFL writing activities (Brown, 2001). This issue addresses the concept of how ‘real’ the writing activities given to the students are. In order to achieve understanding in how to write an essay in real-world contexts outside of the classroom or university, the students need to be exposed to content-based, theme-based, or task-based activities (Brown, 2001), where they can get ample opportunities to convey genuine information on topics of intrinsic interest. The Internet seems to offer this possibility (Reeves, Herrington, & Oliver, 2002).

Different entry levels of students

The fifth challenge is the range of different English entry levels in most groups of students. Kroll (2001) suggests that “one of the reasons why teaching writing is such a challenge is that most classes contain a mixture of students—those who have placed
directly into a particular level of a course and those who have passed into that course in sequence from a previous one” (p. 223). In an EFL writing class, the competencies of the students vary a great deal because when they join it, they are not measured by their writing skills. As a result, they may have the same speaking skills but when it comes to writing, their skills may differ significantly. This makes it difficult for the writing lecturers to establish the learning objectives.

Class sizes

Class sizes also contribute another challenge (Al-Jarf, 2006; Exley, 2005). A big class creates many problems and, according to Harmer (2007), the size of the class also determines the teaching techniques. Ideally, in a writing class, the number of the students is around ten to fifteen. With a medium number of students, the lecturer can provide enough supervision and guidance to help them achieve their writing proficiency to their potential. Alternatively, they can also form their own study groups and together as a group, the students can help one another to solve their problems. This is not always possible within large groups of students.

Cultural influence

The last significant challenge is cultural influence. The students are also influenced by cultural aspects while producing pieces of writing in their L2 (Brown, 2001; Cotterall & Cohen, 2003). It is quite possible that because of years of schooling, reading, writing, thinking, asserting, arguing and defending in one’s own language or culture, that native culture shapes one’s L2 composition. Although there are some widely acknowledged weaknesses in his work, Kaplan’s (1966) classical model for the different rhetorical patterns found in different cultures has much significance for EFL. Kaplan identified that discourses across cultures differ not only in grammatical features but also in generic and rhetorical patterns. This explains the significant influence of some cultural
aspects on L2 literacy and also indicates the need for language lecturers to reflect on the importance of cultural aspects in the context of EFL writing classes.

Such a range of limitations and problems in EFL settings creates particular challenges for EFL students and their lecturers. Extra efforts are necessary to tackle the limitations and problems to produce high quality programs. Offering a hybrid learning environment may provide a better tool to achieve better learning outcomes.

**EFL writing and the use of online technology**

Based on the definitions, methods, trends and limitations of EFL presented earlier, the tasks of teaching EFL writing skills can be daunting. Both the lecturers and the students can feel a heavy burden. The teaching-learning activities need to be carefully scaffolded in such a way that they are meaningful to the EFL writing students.

It has been recognised that the introduction of technology in online learning programs may bring advantages for second language teaching and learning (Kung & Chuo, 2002; Liu, Moore, Graham, & Lee, 2002; Wang, 2005). As a burgeoning technology, online technology is believed to facilitate teaching and learning opportunities. Instant access, anytime, anywhere, with this technology brings flexibility to both the lecturers and students. In addition, the rich authentic materials provided on the Internet may also provide features where students can construct knowledge while engaged in a learning community (Reeves et al., 2002). For this reason, the incorporation of online technology in EFL writing classes, if harnessed to its maximum pedagogical potential, may solve some of the challenges discussed earlier.
Making online learning more effective

To become engaged in online activities is not an easy task. It has been noted that many online learning communities, which used to be active and grew up to a certain maximum number of interactions, often become less active and begin to disappear (Schwier, 2007).

As online communities experience their life cycles, maintaining an active community is necessary but may not be a simple thing to do (Iriberry & Leroy, 2008). Pardo and Penalvo (2008) share this opinion and state that “turning a group of students into a learning community is a real art, as is turning a hundred musicians into an orchestra” (p. 52). It is therefore important to consider five elements in order to make online learning communities more effective: good technology, good pedagogy, active social interactions, good facilitators and excellent technical support.

Technology

Educational technology such as overhead projectors, filmstrips, movies, radio, and television broadcasts has been in use in education for a long time (Caladine, 2008). Its use in language teaching and learning is not a new phenomenon. Some relevant terminologies have aptly described how technology is incorporated in the language teaching and learning classrooms, for example, CALL (Computer Assisted Language Learning) and TELL (Technology Enhanced Language Learning). The popularity of the two terminologies has led to some International organisations, like GloCALL, becoming enthusiastic in their support for language teaching and learning with technology. Different issues related to the use of technology in EFL teaching have been discussed in their International conferences since 2004. The information related to the 2009 conference can be accessed via http://glocal.org/.
With online activities, technology is the main vehicle to provide environments conducive to teaching and learning. Without adequate and reliable technology, online activities cannot be realised nor enhanced. In recent times, however, technology has been developed significantly, making it possible to support the proliferation of online instruction (Dudeney & Hockly, 2007). With the current advances of technology, more opportunities have been made available to introduce technology into the classrooms. Better Internet connections, better high-powered computers, more bandwidth and LMSs as open sources, which are becoming more popular (Caladine, 2008), have made it possible to provide integrated and conducive online classes.

It is worth mentioning that in many learning environments, the use of technology is not meant to replace human resources (Shank, 2008; Wilson 2008). Rather, it is intended to complement and enhance regular classroom work and the lecturers’ effectiveness will be extended through the use of these technologies. The students can use technology to reinforce the content they have learned in the classroom. In this way, the students can also have ample opportunities to expand their existing knowledge by dealing with complementary activities which are completed and submitted online. The exposure to authentic materials found in the Internet can assist the students to solve real world problems (Nelson, 2008). For that reason, the use of technology is becoming increasingly important and it will become a normal part of English Language Teaching (ELT) practice in the coming years.

Online programs, such as the INHERENT program mentioned in Chapter One, can be established and the quality of the contents can also be improved, depending on the issues at hand. In fact, as a tool INHERENT has contributed significantly to the
distribution of online programs from different participating Indonesian universities, both government-run and public (Irwandi, 2008; Jalal, 2008).

**Sound pedagogy**

Sound pedagogy is essential to enhance learning so that instruction can be carried out effectively (Koontz et al., 2006; Palloff & Pratt, 2007a). Instructional objectives need to be made clear and achievable. Obviously, while using new technology in learning environments, new ways of teaching, learning, and knowing need to be explored (Koontz et al., 2006; Pea, Wulf, Elliot, & Darling, 2003). Traditional ways may have become obsolete and not compatible with the needs for education in the 21st century (Pea et al., 2003). New ways of teaching, learning and knowing clearly imply the need for conceptually new instructional designs within the field of online learning because “course content is often simply transmitted in a different way, without considering other elements the new medium allows. In effect, educators are placing old wine in new wineskins and failing to reap the benefit of the new product” (Koontz et al., 2006, pp.39-40; Palloff & Pratt, 2007a). Palloff and Pratt (2007a) further argue that it is not the curriculum but the teaching methodology that should be transformed. When the pedagogy changes, the course must also change. In other words, it is not about how the syllabus looks but about how it is delivered.

In relation to pedagogy, Christie and Ferdos (2004, p. 15) state, “Good pedagogy can inform and be supported by good ICT. Poor pedagogy can subvert the very point of using good ICT. A combination of bad pedagogy and bad ICT is a disaster for the future of e-learning.” It is true that without good pedagogy, the teaching objectives might be obscure. It is also important to emphasise that content remains a strong focus in any instructional design paradigm because it is the very stuff of learning. If this principle is
ignored, everyone involved will experience chaotic learning processes whose lack of focus will lead directly to a lack of practical results (Gagné, 2005).

*Active social interactions*

Apart from technology affordance and good pedagogy, active social interactions are considered to be the key to successful online activities. Bielecyck and Collins (1999), for example, pointed out that technology scaffolds alone are not sufficient to ensure that the engagement and interaction necessary for knowledge-building discourse to occur within online learning environments; they contend that social interactions also need to be scaffolded within online environments.

Much research (Koontz et al., 2006; Palloff & Pratt, 2007b) has been conducted to investigate the role of social interactions within online learning environments. Effective online learning occurs when a learning environment is supported continuously by evolving, collaborative processes focused on supporting or scaffolding individual students or group performances (Koontz et al., 2006; Palloff & Pratt, 2007b; Yanes et al., 2006). The whole idea of effective online learning is supported by the high degree of interactivity and participation of the students. To be more specific in scope, this interactivity and participation can be manipulated or controlled by the way scaffolding is applied to each student. Thus, put another way, an effective way of scaffolding positively influences the interactivity of the students, which eventually facilitates effective online learning, creating a vibrant learning community as a whole.

It is also worth mentioning that in its course of development, the community life cycle needs to be monitored (Wenger, McDermott, & Snyder, 2002). An active community is the one that is involved in a lot of discussions. Such a community needs members who are active and dedicated and these individuals belong to the “core group”
This active interaction must be monitored so that the spirit of joining in the community itself will not fade away. In relation to that, the role of the facilitator is crucial in order to sustain the life span of this online community (Pardo & Penalvo, 2008). According to Watkins (2005), a minimum of four to five active people are required to activate the community and engagement in the collaboration of constructing knowledge.

In his online matrix, Watkins classified group sizes into three categories: A small group consists of one to seven people. A medium group consists of eight to fifteen people, while a large group consists of more than sixteen people. If a group is too small, collaboration may be poor and inadequate. The medium group seems to represent an appropriate number of participants to make this an effective place to collaborate. A large group, however, will be difficult to control because sometimes many students may post different things and feedback cannot be given appropriately by the facilitator.

Additionally, if there is an objective to be reached in the learning activity and the participants in an online program can clearly see a connection between the tasks which have been assigned to them and the final assessment or grade that they will receive, they will get engaged in the teaching-learning activities more enthusiastically (Davies, 2006; Mason & Rennie, 2008). Furthermore, student motivation is important to determine effectiveness and efficiency of learning. Highly motivated students will learn even in a situation where a poor teacher is present (Caladine, 2008).

**Effective facilitators**

Without doubt, creative lecturers also contribute much to the success of online programs. According to Lewis and Allan (2005), such a community not only needs
active participants, it also needs a good facilitator, someone who is motivated, proactive, collaborative, credible and technically capable, who can moderate the discussions.

As the course progresses, the roles of the facilitator might also change in order to establish group interactivity. Table 2.2, from Conrad and Donaldson (2004), presents the changing phases of engagement between the instructor and learners. As the quality of interactivity progresses in the course, the facilitator provides less control over the students.

Table 2.2

<table>
<thead>
<tr>
<th>Phase</th>
<th>Learner Role</th>
<th>Instructor Role</th>
<th>Weeks</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Newcomer</td>
<td>Social negotiator</td>
<td>1-2</td>
</tr>
<tr>
<td>2</td>
<td>Co-operator</td>
<td>Structural engineer</td>
<td>3-4</td>
</tr>
<tr>
<td>3</td>
<td>Collaborator</td>
<td>Facilitator</td>
<td>5-6</td>
</tr>
<tr>
<td>4</td>
<td>Initiator/partner</td>
<td>Community member/ challenger</td>
<td>7-16</td>
</tr>
</tbody>
</table>

Source: Adapted from Conrad & Donaldson (2004, p. 11)

Conrad and Donaldson (2004) argue that in the first few weeks, a good facilitator should exert more influence but release it gradually in the later weeks. A good facilitator should give more freedom to the students to construct their knowledge. In the first stage, as a social negotiator, a facilitator forms friendships and relations among the members because the students are newcomers in this new learning environment. In the second stage, as a structural engineer, a facilitator structures the interactions in such a way that everyone involved can learn new knowledge effectively and the students function as cooperators. In the third stage, as a facilitator, s/he is facilitating the learning experiences. The students, on the other side, are given more freedom as collaborators. Finally, in the last stage, as a community member, the facilitator provides total freedom
to the students, who function as initiators/partners to go in the directions they want. The facilitator occasionally gives challenges so that the students can perform better.

The phases of engagement proposed by Conrad and Donaldson (2004) are in line with the legitimate peripheral participation, initially formulated by Lave and Wenger (1991). Lave and Wenger suggested that newcomers slowly become part of a learning community and move from peripheral to core participation within the community of practice (Wenger et al., 2002) as they share their understanding concerning what they are doing in their activities.

**Excellent technical support**

A technical support team is also needed to ensure that the online activities can be accomplished successfully (Salmon, 2004). Many different issues can happen in the process of teaching and learning online. As a result, at least one member of the technical support team should be online at the same time so that whenever there is a technical problem, the person can be contacted anytime to provide technical assistance. Additionally, technical support can also be realised as a form of training given to both students and lecturers. This is particularly necessary to boost computer literacy among the learning communities as a whole. Technical support can also be given in another variety of means, for example technical discussions, Frequently Asked Questions, and student call centres (Anderson, Rourke, Garrison, & Archer, 2001; Berge, 1995).

**Hybrid learning communities**

The hybrid learning mode has been established as a reaction to the negative aspects of online programs. Apparently, in spite of the promises claimed by online courses, many of them have failed (Driscoll, 2008; Shank 2008). Different kinds of
pitfalls have been encountered in online programs. These pitfalls can be classified into four categories: organisational barriers, pedagogical problems, technical problems and financial problems (Driscoll, 2008). With such pitfalls and problems encountered in online programs, educators have begun to critique the online programs and, as a result, to offer another mode, called the ‘hybrid’ mode. A hybrid, or blended, learning community is a combination of two modes; namely: the face-to-face and online modes (Buzzetto-More & Sweat-Guy, 2006; Mossavar-Rahmani & Larson-Daugherty, 2007; Palloff & Pratt, 2007a).

Many research studies have been conducted related to hybrid learning. Young (2002) noted that hybrid learning is an effective and efficient way of expanding course content which also supports in-depth delivery and analysis of knowledge. Many other experts also believe that the hybrid mode increases students’ satisfaction and motivation in their learning experiences (Albrecht, 2006; So, 2009; Woltering, Herrler, Spitzer, & Spreckelsen, 2009). Due to its effectiveness and efficiency, hybrid learning may be contributing to a paradigm shift in higher education settings (Allen & Seaman, 2003; Lorenzetti, 2005; Young, 2002). More hybrid modes have been implemented in higher education and seem to be favoured by many lecturers because they provide flexibility and ability to move course components to either the online or F2F mode as necessary (Dziuban, Hartman, Juge, Moskal, & Sorg, 2006; Wilson, 2008).

Yanes (2004) also confirmed that the combination of the two modes has specifically enhanced the learners’ capabilities in constructing their knowledge. Both the lecturers and students manage to achieve higher satisfaction with the way they experienced the process of learning in spite of the fact that they had to do some extra work in accomplishing all of the tasks assigned in the teaching-learning processes such
as replying to emails, getting involved in chat rooms, presenting projects, being engaged in discussion forums, and dealing with the automated content quizzes.

As a learning community evolves, whether F2F or online, students have the opportunity to extend and deepen their learning experiences. They may also test out ideas by sharing them with a supportive group, and receive critical and constructive feedback. Within this learning community, knowledge and meaning are actively constructed (Palloff & Pratt, 2007b). In such a context, a learning community provides vast opportunities for personal and social advancement in knowledge construction.

**Scaffolding concepts**

Within a vibrant learning community, scaffolding plays an important role. It may determine the success of a learning atmosphere as it is assumed that if the students are scaffolded, they will become actively engaged in their learning activities (Dabbagh, 2003). Dabbagh further commented that “scaffolding is all about providing the right amount of structure in a learning environment” (p. 40). Consequently, this will create a conducive learning environment where every student is constructing knowledge. This section deals with the genesis of scaffolding, developments of scaffolding theories, and scaffolding concepts used in this study.

**Genesis of scaffolding**

With the right word or question or other device a teacher may put in place the scaffolding that will allow new knowledge to be constructed, incomplete or wrong concepts to be challenged or corrected, or forgotten knowledge to be recalled. This scaffolding stimulates learner activity in the zone of proximal development. Further, when the building is finished or the renovation complete, the scaffolding is removed. It is not seen in the final product. This is also the case in cognitive scaffolding. When a piece of knowledge has been learned and understood, the mechanism by which it was constructed is no longer apparent. However, the
“memory” of the scaffolding may still remain. Just as a builder knows how to construct the next scaffold for the next building, a teacher will know how to assist the learner to construct more knowledge at a later time. (Holton & Clarke, 2006, p.129)

The metaphor of scaffolding was first introduced by Wood, Bruner, and Ross in 1976 (Hobsbaum, Peters, & Sylvia, 1996; Holton & Clarke, 2006; Lipscomb, Swanson, & West, 2004; Pea, 2004; Verenikinia, 2008), and was defined as follows: “an adult controlling those elements of the task that are essentially beyond the learner’s capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence” (Wood, Bruner, & Ross, 1976, p. 9). Based on the definition, it is clear that the concept of scaffolding was first intended to focus on the actions of an adult teacher in helping younger learners. The learning tasks were divided into accessible components and the younger learners’ attention was directed to relevant and important issues being tackled at hand.

However, the seeds for the diffusion of the concept of scaffolding were already latent in Vygotsky’s (1962, 1978) socio-constructivist theory, where it was perceived that social interaction is very important for learners when negotiating meaning during learning and social activities are the source of complex mental processes (Beed, 1991; Clark & Graves, 2005; Dabbagh, 2003; Doering & Veletsianos, 2007; Jelfs, Nathan, Barrett, 2004; Pea, 2004). Vygotsky (1978) viewed learners as active constructors of knowledge and he further considered that thinking could not be separated from the social setting and, as a result, it is intertwined with the thinking of others as a community. Thus, language was regarded by Vygotsky (1978) as the critical bridge between the social and the individual’s mental functioning (Berk & Winsler, 1995). The opportunity to interact with other learners in sharing, constructing, and negotiating meaning leads to knowledge construction. It is only through social interaction that learners build more
complex interpretations and understandings of the world. By exchanging information, knowledge building is taking place and language, as a medium of communication, is an important contribution to helping the learners make sense of the world (Wells, 2007). These processes, however, will not mature instantly and instead personal interaction is deemed necessary prior to knowledge construction (Pifarré, 2007).

In other words, according to Vygotsky (1978), individual activities which take place in cultural contexts are mediated by language and other symbol systems, and can be best understood when investigated in their historical development (John-Steiner & Mahn, 1996; Wells, 2007). Since the activities are framed around a community, it plays a central role in the process of meaning making among the community members. Thus, it is likely that the people around the learners would greatly influence the way learners perceive the world (Kilpatrick et al., 2003). Vygotsky (1978) also suggested that the type and quality of tools which are available and can be accessed by learners determines the rate of their knowledge development. These tools may include adults, more knowledgeable others, culture and language.

Thus, socio-constructivist theories such as Vygotsky’s (1978) view learning as integration into a community of practice in which social actions are identified and classroom activities can be designed accordingly to represent what is reflected by such a community of practice. Knowledge and understandings are constructed when individuals are engaged socially in any discourse and activities about shared problems and tasks (Forman, 1992; Wang 2007). The developing individual relies on the transmission of experiences from others in the community and participation in a wide variety of joint activities can provide learners with the opportunity for synthesising several influences into their novel modes of understanding and
participation. By internalising the effects of working together, the novice acquires useful strategies and crucial knowledge (John-Steiner & Mahn, 1996; Kilpatrick et al., 2003). Additionally, socio-constructivists believe that cognition and thought are moulded by the society and developed as tools for shared problem-solving (Kim, 2001; Tort-Moloney, 1997).

In an attempt to find the relationships between the individual construction and social mediation of knowledge within a community of practice, Jaworski (2003) proposed the following characteristics:

1. Knowing is an action in which the learner participates,
2. Learning is a process of comparing current knowledge with previously-constructed experiences, which results in the knowledge being reinforced or adapted,
3. Within a learning environment, social interactions play an important part of this experience and contribute fundamentally to individual knowledge construction,
4. Shared meanings through negotiation in the learning environment lead to the development of common knowledge, and
5. Learning takes place within some socio-cultural setting—“a community of practice” in which learners are immersed in social actions and social interactions.

Many educational experts (e.g., Clark & Graves, 2005; Harrison, 2004) believe that a key construct within Vygotsky’s theory is the notion of “the Zone of Proximal Development (ZPD)”, which was defined as:

The distance between actual developmental level as determined by independent problem-solving and the level of potential development
as determined through problem-solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86)

However, the original conceptualisation of the ZPD has been expanded, modified and changed with the passage of time. A new formulation of the ZPD, proposed by Gillani (2003), was that learners progress from their actual ability to their potential ability through the four phases within the Zone of Proximal Development. Firstly, it starts from the external plane, in which there are two phases (i.e., reliance on others and collaboration with others) where the students learn things among the people in their learning community. During these two phases, scaffolding by adults or more capable peers plays a crucial role in the process of learning. The learners and the scaffolders work together to construct knowledge. Then, this learning moves on to the internal plane, in which there are two remaining phases (i.e., self-reliance and internalisation) where the students learn things individually within themselves until they reach the internalisation phase. Eventually, when they have successfully experienced these four phases, the students may have successfully constructed their knowledge. The phases of scaffolding are illustrated in Figure 2.1.

![Figure 2.1 The phases of ZPD](source: adapted from Gillani (2003, p. 85))
Another key notion developed by Vygotsky (1978) that also has much relevance for scaffolding is MKO (More Knowledgeable Other) (Harrison, 2004). MKO means the process of helping is conducted by someone who has better skills than the learner to complete a particular task, process or concept. In this modern era, however, an MKO does not always refer to a person but it can be represented by a computer or an electronic tutor (Galloway, 2001). These two constructs (the ZPD and MKO) are widely used, accepted, and believed to be Vygotsky’s (1978) useful contributions to knowledge construction in a learning community (Galloway, 2001).

Vygotsky (1978) considered the potential level of development was just as important if not more important than the level of development demonstrated by independent problem solving. He suggested that through social interaction with more capable adults and peers, children can collaboratively construct knowledge which was otherwise somewhat beyond their reach and then internalise it, possibly for subsequent individual problem solving (Driver, Asoko, Learch, Mortimer, & Scott, 1994; Hartman, 2002; Rogoff, 1990).

It is in this situation that scaffolding provided by an MKO is needed in helping the students expand their knowledge construction in some carefully-designed instruction and is gradually removed as the students are expected to become self-regulated and independent in their learning (Hartman, 2002; Lipscomb et al., 2004) because the concept of scaffolding provides a connotation that it is a temporary and supportive framework (O'Donnell, Hmelo-Silver, & Erkens, 2006). As scaffolding is carefully designed, the role of an MKO in this scaffolding is important to facilitate the learner’s transition from doing assisted to unassisted tasks around a particular content (Berk & Winsler, 1995; Sthapornnanon, Sakulbumrungsil, & Watcharadamrongkun, 2009). It is also important to maintain the tasks in a student’s
ZPD, a level that is one step above their standard independent functioning in order to challenge the students to perform beyond their current level of development to solve their problems (Berk & Winsler, 1995).

**Development of scaffolding theories**

Since the term scaffolding was coined in 1976, there has been a great deal of discussion and debate about what the concept of scaffolding actually means. Scaffolding is no longer associated with interactions between individuals only. These days, artefacts, resources, and environments themselves are also utilised as scaffolds (Puntambekar & Hubscher, 2005). Put differently, scaffolds can consist of tools, strategies, and guides which support students so that they can achieve a higher level of meaning making; one which would be impossible if students worked on their own (Galea, Stewart, & Steel, 2007; Vygotsky, 1978). Holton and Clarke (2006) propose more concrete tools be used as scaffolds. According to them, “scaffolding may also be provided in book form, over the Internet, by telephone, and so on” (p. 130). More importantly, scaffolding can be provided through supplying hints, prompts, probes, simplifications or other similar learning supports (Ronen & Langley, 2004).

A brief summary of some scaffolding theories which can be found in the literature includes:

- Metacognitive scaffolding and conceptual scaffolding (Bell & Davis, 1996)
- Conceptual scaffolding, metacognitive scaffolding, procedural scaffolding, and strategic scaffolding (Hannafin, Land, & Oliver, 1999)
- Soft scaffolding and hard scaffolding (Brush & Saye, 2002)
• Domain: conceptual and heuristic scaffolding; agency: expert scaffolding, reciprocal scaffolding and self-scaffolding (Holton & Clarke, 2006)

• Cognitive scaffolding, technical scaffolding, and affective scaffolding (Yelland & Masters, 2007)

• Technical scaffolding, content scaffolding, procedural scaffolding and metacognitive scaffolding (Reingold, Rimor, & Kalay, 2008).

These six types of scaffolding will be briefly examined below in order to contextualise the field within which this thesis draws upon.

Bell and Davis’ (1996) scaffolding concepts

Bell and Davis (1996) proposed two kinds of scaffolding: metacognitive scaffolding and conceptual scaffolding. Metacognitive scaffolding means providing activity prompts (“largely project dependent”) and self-monitoring prompts (“isomorphic across projects”) to influence the development of students’ understanding whereas conceptual scaffolding refers to activities where students receive hints for the evidence (“evidence hints”) and they are provided with some conceptual framework to sort the evidence (“evidence organisation”).

Hannafin, Land, and Oliver’s (1999) scaffolding concepts

Hannafin, Land, and Oliver (1999) proposed four types of scaffolding. First, conceptual scaffolding which means to provide guidance on what to consider. Second, metacognitive scaffolding which indicates guidance on how to think about the problem under study. Third, procedural scaffolding which is used to refer to guidance on how to utilise resources and tools; and finally, strategic scaffolding which is applied to offer guidance on approaches to solving the problem.
**Brush and Saye’s (2002) scaffolding concepts**

Brush and Saye (2002) discussed soft scaffolding and hard scaffolding. Soft scaffolding is defined as “dynamic, situation-specific aid provided by a teacher or peer to help with the learning process” (p. 2) and hard scaffolding is defined as “static supports that can be anticipated and planned in advance based upon typical student difficulties with a task” (p. 2).

**Holton and Clarke’s (2006) scaffolding concepts**

Holton and Clarke’s (2006) conceptualisation of scaffolding differentiates between domain and agency. In terms of domain, there are two types of scaffolding: conceptual and heuristic. Conceptual scaffolding refers to scaffolding provided for the development of concepts and heuristic scaffolding indicates how scaffolding is provided to find ways to solve a problem. In terms of agency, there are three types of scaffolding: expert, reciprocal and self-scaffolding. Expert scaffolding is scaffolding given by an expert. Reciprocal scaffolding refers to an activity where students work in groups. Self-scaffolding indicates a situation when someone is scaffolding oneself. Holton and Clark’s (2006) types of scaffolding will be discussed in detail later.

**Yelland and Masters’ (2007) scaffolding concepts**

Yelland and Masters (2007) proposed three types of scaffolding. First, cognitive scaffolding is provided to construct understanding. Second, technical scaffolding is provided to use computers/technology and, finally, affective scaffolding is provided as emotional support.

**Reingold, Rimor, and Kalay’s (2008) scaffolding concepts**

Technical scaffolding is provided to follow technical instructions. Content scaffolding is given to add, elaborate or correct information. Procedural scaffolding is established to assist in data handling—searching, organising and representing data. Metacognitive scaffolding is provided when students present rationales for tasks and activities, focus on the process of learning or support reflective writing.

These six different scaffolding theories have been used to assist learning in different contexts and in different research studies. Each has its own results applicable to each context. All these kinds of scaffolding have been provided to the students from the point of view of teaching. Thus, it could be concluded that scaffolding has always provided help to students to facilitate learning something specific or to achieve a certain learning objective. Table 2.3 provides a summary of the six types of scaffolding.

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<tbody>
<tr>
<td>Conceptual</td>
<td>Conceptual</td>
<td>Soft &amp; Hard</td>
<td>Conceptual</td>
<td>Cognitive</td>
<td>Content</td>
<td></td>
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<tr>
<td>Metacognitive</td>
<td>Metacognitive</td>
<td>Strategic</td>
<td>Heuristic</td>
<td>Metacognitive</td>
<td>Technical</td>
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<tr>
<td>Procedural</td>
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<td>Expert</td>
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<td>Reciprocal</td>
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<td>Affective</td>
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<td></td>
<td>Affective</td>
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</table>
Scaffolding is a concept that has led to the development of other approaches that seek to understand the nature of learning, a key approach that is concerned with learning interactions. Similar concepts using different terminology can be found in the literature. Moore (1998), for example, proposes three kinds of interactivity: learner-content/information/learning materials, learner-tutor, and learner-learner. Schofield, Sackville, and Davey (2006) add three additional categories: learner-technology and complex multimedia, participants/learners/tutors—the professional community, and intrapersonal interactivity—self reflection and meta-cognition.

A further approach to constructing learning has been offered by Caladine (2008) who suggests three kinds of interactions: (1) interaction with materials, (2) interaction with the facilitator and (3) interaction between learners. Interaction with materials may include looking up a definition in a reference book; pausing, rewinding and playing sections of a video or audio recording; searching the Internet or World Wide Web, and interacting with computer-aided learning packages. Interaction with the facilitator can be in the form of asking questions in lectures and workshops, being involved in a tutorial discussion, making phone calls, sending emails and receiving feedback on assessments. Interaction between learners occurs when the students work as a group or team on a project for assessment.

To better understand the concepts, the comparison of the three different kinds of interactivity/interaction can be seen in Table 2.4. The three kinds of interactivity/interaction share the same characteristics, with Schofield et al.’s (2006) theory which has been expanded from Moore’s (1998) theory.
Another concept which is similar to interactivity/interaction and which is also related to meaning making or construction of knowledge is offered by Horton (2008) in his knowledge management framework, in which he proposes five types of knowledge management: increasing knowledge, capturing knowledge, refining knowledge, sharing knowledge and applying knowledge. All of these five types of knowledge management can be actualised through interaction with the lecturer, other peers and learning materials.

Most of the scaffolding concepts discussed in this section, with the exception of Holton and Clarke’s, focus more on the different kinds of assistance given to students. The students are the objects of the research in the knowledge construction and different treatments are given to the students to help them in their learning journeys. In this way, the focus of scaffolding is likely to be top-down.
Scaffolding concepts used in this study

Holton and Clarke’s (2006) theory of scaffolding was adopted and further expanded in this study and the rationale will be specifically discussed in the next section. Holton and Clarke (2006) define scaffolding as: “an act of teaching that (i) supports the immediate construction of knowledge by the learner; and (ii) provides the basis for the future independent learning of individual.” (p. 131). In other words, scaffolding may help a student learn a new lesson with the hope that the student may later become autonomous. Although scaffolding may be associated with activities of help or guidance, with the definition provided above, scaffolding is seen from a specific perception of time in which help or guidance is extended to a student continually until the student can construct knowledge independently, a condition where scaffolding is already removed and that student is ready to pursue her/his lifelong learning. However, Holton and Clarke (2006) admitted that some limitations do exist in an act or in a sequence of acts of scaffolding. Scaffolding may not necessarily lead to success in facilitating learning or problem solving activities conducted at a particular time.

Holton and Clarke (2006) used scaffolding in mathematics education but they claim that the scaffolding they developed could be applied in all subject areas and for all learners. They also suggest that “because scaffolding of knowledge is a vital aspect of learning, it is important that learners become aware of the scaffolding processes...” (p.130). With the learners being aware of the scaffolding processes, they may be able to scaffold themselves in their future learning situations.

Holton and Clarke (2006) also classified scaffolding in a more specific way. As noted earlier, they differentiated between the domain and agency of scaffolding. In terms of domain, Holton and Clarke (2006) discussed two key concepts, conceptual and
heuristic scaffolding. Conceptual scaffolding is provided to promote conceptual development, while heuristic scaffolding refers to ways to solve a problem. Conceptual scaffolding can be found in all types of scaffolding because it is basically related to the essential function of scaffolding to construct knowledge. It is argued that both the conceptual and heuristic scaffolding contribute to the construction of knowledge.

In terms of agency, Holton and Clarke (2006) point out further that there are three kinds of scaffolding: expert, reciprocal, and self-scaffolding. This distinction is crucial, because they consider that the ultimate goal of education is to produce independent learners, who can solve their own problems when no expert is present to help them. This conceptualisation of agency is Holton and Clarke’s (2006) unique feature because it cannot be identified in all of the other types of scaffolding discussed earlier (See Table 2.3). The actors/doers/givers of scaffolding are emphasised, as presented in the following:

*Expert scaffolding*

According to Holton and Clarke (2006), “situations of expert scaffolding involve a scaffolder with specific responsibility for the learning of others” (p. 134). The lecturer or scaffolder, as an expert in a certain area, provides scaffolding to the students or the scaffoldees. In this phase, the students receive the scaffolding from the lecturer. Modelling can be an effective technique and providing real examples will also be good because the students may imitate what the lecturer has done in the classroom. It is like giving a small piece of the whole picture. Later on, the students will be trying to find the missing parts in their knowledge construction.
Reciprocal scaffolding

Holton and Clarke (2006) define reciprocal scaffolding (See Holton & Thomas, 2001) as follows: “situations of reciprocal scaffolding take place where two (or more) people are involved in working collaboratively on a common task” (p. 136). Within this process, the students are working together with their peers. They exchange information in their search for knowledge. This can be considered as a trial and error phase for them in their efforts to construct knowledge. Disequilibrium may occur quite often in this reciprocal scaffolding and they need to settle this by either assimilating or accommodating the new knowledge.

Self-scaffolding

Holton and Clarke (2006) explain self-scaffolding (see Holton & Thomas, 2001) as “situations in which an individual is able to provide scaffolding for her (him)self when any problem or concept that is new to the individual is being tackled” (p. 136). They further argue that “self-scaffolding or metacognition can be seen as a form of internalised conversation in which the student interrogates their epistemic self” (p. 128). In this type of scaffolding, the students are scaffolding themselves in their search for knowledge by finding other resources on their own and adjusting the knowledge they have acquired. While doing so, the students may be involved in reflective thinking, which “contributes to the growth of higher order of thinking such as making inferences, synthesizing information, analysing information, and evaluating information” (Yanes et al., 2008, p. 29).

Rationale for using Holton and Clarke’s (2006) scaffolding theory

Of the six different scaffolding concepts discussed so far, Holton and Clarke’s theory differs from the others in three ways. First, the others treat scaffolding as
providing different kinds of guidance, support, or assistance of some sort provided by the lecturer to the learners, with less focus on the agency (the actors/doers/givers). In Holton and Clarke’s case, they explicitly perceive scaffolding from its agency (the actors/doers/givers) and may treat learners as actively scaffolding themselves at certain times in their teaching-learning processes. This is particularly evident in self-scaffolding, which is claimed to be potentially the same as metacognition (Holton & Clarke, 2006).

Second, the others are likely to place more emphasis on scaffolding from the point of the lecturers who attempt to provide the scaffolding with the exception of soft scaffolding and metacognitive scaffolding. Hence, the scaffolding focus has been on the learners (receivers of the scaffolding) who were given the scaffolding. In this case, scaffolding represents passive scaffolding only, as given by an expert to a student. In Holton and Clarke’s case, they perceive it from the viewpoint of the students who provide the processes of scaffolding. In other words, the students are given freedom to initiate the scaffolding actions in their learning interactions. Thus, in expert scaffolding, the focus is on the lecturer providing scaffolding to the students. In reciprocal scaffolding, it is the student who provides scaffolding to another student or peer(s) and in self-scaffolding, it is also the student who is scaffolding her/himself in her/his learning journeys to construct knowledge. This indicates that scaffolding is not always necessarily provided by the teachers/lecturers. In this study, the process of active scaffolding done by the actors/doers/givers (agency) is investigated further to add to the extension of the scaffolding theories.

Third, Holton and Clarke’s (2006) theory of scaffolding (expert, reciprocal and self) provides more flexibility in its use in learning than other linear models. Since this study was conducted at university level, such scaffolding processes may become useful
and relevant for adult students, who may also prefer flexible learning styles in their academic activities. More importantly, the hybrid learning environment developed in this study–with its flexibility and non-linear atmosphere–may also effectively support the use of Holton and Clarke’s (2006) theory of scaffolding.

**Scaffolding to support online learning**

Scaffolding may support online learning for two main reasons. First, research studies have shown that scaffolding positively affects student achievement (Baylor, 2002; Bereiter & Scardamalia, 1984; Cho & Jonassen, 2002; Demetriadis, Papadopoulos, Stamelos, & Fischer, 2007; Lim, Plucker, & Nowak, 2001), develops conceptual understanding (Zydney, 2008), and improves writing performances (Englert, Wu, & Zhao 2005). The studies have identified that to be successful in their learning endeavours, students need to be carefully scaffolded. In general, scaffolding is what a lecturer does when working with a student to solve a problem, carry out a task, or achieve a goal which would be beyond her/his unassisted efforts. In that sense, scaffolding seems to be the smallest element in the entire teaching-learning machinery.

Second, in order to achieve a successful level of social interaction within an online learning community, students also need to be carefully scaffolded (Oliver & Herrington, 2003). Careful scaffolding does not mean that the process of learning is hierarchical or linear. In order to support community development, online learning has to be enhanced by providing the learners with appropriate tools to establish some form of community through the learning processes. The opportunities from the community derive from the learning achieved through the process of articulation, discussion and information sharing. It takes a degree of skill on the part of the online lecturer to be able to create a community within an online setting (Oliver & Herrington, 2003).
Online learning atmospheres may offer new potentials for implementing scaffolding processes (Dabbagh, 2003) to cause them to become engaged in valuable learning processes (Pifarré, 2007). Moreover, these online learning opportunities may also offer the provisions of complex tasks which are integrated in multiple resources to respond to specific difficulties experienced by the students (Ronen & Langley, 2004). Thus, by scaffolding the students, the lecturer can provide a common guideline for everyone to experience a certain pattern of learning so that a certain goal can be achieved. Outside these scaffolds, it is anticipated that learning processes can occur without any hierarchy and chaotic creativity is a good term to describe it. As stated earlier, chaotic creativity refers to the chaotic way of learning due to the condition of the hyper-mind of the learners and the hypermedia provided in the Internet as learning sources. What really happens in online learning, as Thurlow, Lengel, and Tomic (2004) put it, is much like what happens to a helix-formed pattern. In this case, something is converged, separated, interconnected, diverged and they come together again. More importantly, learning in this fashion will not be likely to return to the same spot again. This type of learning is the same as the one expressed in the learning-centred methods discussed earlier, referring to a non-linear process of learning. In such a situation, students may find scaffolding useful to guide them to expand their knowledge.

Proposed conceptual framework to apply scaffolding

Based on the literature review, the following conceptual framework (Figure 2.2) is proposed as a means to provide bottom-up steps in the theory-building, using scaffolding to facilitate and nurture a conducive hybrid learning community engaged in EFL essay writing. The carefully scaffolded activities in the teaching-learning activities are central to the development of the next stage in Figure 2.2, the active social interaction. In this
proposed conceptual framework, only the scaffolding processes are described in steps, representing a flexible application of the real scaffolding processes. The instructional steps adopted in the F2F and online modes in this present study will be discussed in detail in Chapter Three, particularly while dealing with the steps of the two cycles respectively. Through the scaffolded activities, the students are encouraged to attend the F2F and online EFL writing class (expert scaffolding), work either collaboratively (reciprocal scaffolding) or individually (self-scaffolding) to accomplish their tasks to search for more knowledge to verify the information they have acquired and share their knowledge with other peers as they have become independent learners. As independent learners, they are ready to extend and construct knowledge in their lifelong learning, which means that these students will continue to learn throughout their entire lives and this process of learning can thrive because of the existence of learning communities or societies (Field, 2006). When the students are actively engaged in their activities, a conducive learning community is established in this hybrid EFL ‘Effective Writing’ class setting.

**Figure 2.2** Proposed conceptual framework
Chapter summary

In this chapter, different kinds of EFL concepts, methods and challenges and how online learning can be utilised to support EFL learning in a hybrid learning community have been described. The genesis of scaffolding, together with the six scaffolding theories have been reviewed to provide a better context in which the research was conducted. The rationale for using Holton and Clarke’s theory in this study has been elaborated and argued. The important role of scaffolding in building an active social interaction among the students in a hybrid learning environment has been discussed. Furthermore, a proposed conceptual framework to apply scaffolding with the ultimate goal of producing lifelong learning in a conducive EFL learning community has also been presented. In the following chapter, the research design to carry out this study will be presented.
CHAPTER THREE: RESEARCH METHODOLOGY

The purpose of this chapter is to provide a detailed description of the research methodology utilised in the study. For that reason, this chapter is divided into five parts: research design, participants, instruments, procedure and timeline, and data analysis methods. It concludes with a summary.

Research design

An action research design, which “involves systematic investigation of new actions by practitioners in order to improve their effectiveness” (Gall, Gall, & Borg, 2005, p. 488), was utilised to address the overall aim of this study. Action research also signifies that it is developed following the constructivist idea, in that knowledge or theory building develops through the continuous construction of knowledge (Sirca & Shapiro, 2007). In other words, the nature of action research itself implies the continuous construction of knowledge through its iterative cycles or stages of development, which can be applied in real practices to improve the conditions of the teaching-learning activities.

Rationale

A number of research designs such as quasi-experimental and action research were considered for this study. However, based on the analysis, it was found that a quasi-experimental design—with treatment and control groups—did not meet the pragmatic and theoretical constraints of this study. Pragmatically, because of equity and administrative issues at the research site, a quasi-experimental study—with the treatment and control groups—was not possible. Theoretically, a quasi-experimental study was not feasible because it did not address the epistemological and ontological assumptions underlying
the aims of the study. As a result, action research was implemented throughout this study.

Three other reasons also mitigated in favour of the selection of an action research design. First, this design involves two main events, namely: ‘action’ and ‘research’. In this study, the emphasis is on the ‘research’ itself so that the relevant theories can be expanded and, based on what is discovered later, ‘action’ can be implemented to change the current online teaching-learning atmospheres at Universitas Pelita Harapan (UPH). The changes in teaching will have a definite impact because the research is carried out by the teachers/educators in their own practice (Lodico, Spaulding, & Voegtle, 2006; Slavin, 2007). This is in line with Dick (2000) who suggests that the ‘action’ will trigger a social change, improvement or implementation in one’s workplace and that the ‘research’ itself consists of learning and understanding, which often leads to publications of research results in academic settings. The synergy of the two terms ‘action’ and ‘research’ may cause action research to be a strong agent of change in education.

Another reason is that the findings from action research can be put into practice straightaway and there seems to be no delay between the study completion and the implementation of the solution (Streubert & Carpenter, 1999). It is noted that action research is designed for practical purposes to produce direct and effective outcomes in the settings in which it is applied (Stringer, 2004, 2008). In this case, action research may fill the gap between theory and practice in education (Johnson, 2005). This indicates that the solutions to the problems can be found effectively at hand.

Eventually, and most importantly, this type of research design is commonly applied in educational settings to bring positive changes or enhance practice (Gall et al., 2005; Johnson, 2005; Schmuck, 2006). Involving teachers/lecturers/educators to study
their classroom problems and issues has become an important direction for education renewal today (Creswell, 2005, 2008). In this way, teachers/lecturers/educators can conduct their practical research suitable for their respective conditions and situations and it is expected that their research will drive new directions which contribute to the betterment of education.

**Action research definitions**

Many different definitions for action research can be found in the literature. Zuber-Skerritt (1991) defined it as:

>a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out. (p. 3)

Streubert and Carpenter (1999) defined action research as “a method of research that involves taking action to improve practice and systematically studying the effects of the action taken” (p. 251). The two terms cannot be separated because the research conducted will influence the action which will be carried out and imposed in the workplace.

Frost (2002) defined action research as “a process of systematic reflection, enquiry and action carried out by individuals about their own professional practice” (p. 25). The definition clearly states that the researchers conduct their own systematic research for their professional improvement.

Schmuck (2006) provides a more meticulous practical definition of action research:
Action research entails studying your own situation to change the quality of processes and results within it. To do action research is to empower yourself to study your actions so that your future actions will be more effective. It also aims to improve your professional judgements and to give you insight into how better to achieve your educational goals. Through action research, you can convert current practices into better procedures, better instructional strategies, and better curriculum. Remember too that action research is a continuous and cyclical professional activity that is integrated into your regular practice. (p. 28)

Stringer (2007) provides a more general definition of action research, as “a systematic approach to investigation that enables people to find effective solutions to problems they confront in their everyday lives” (p. 1). In this definition action research seems to have a broader scope, involving people finding effective solutions to problems in their daily lives. However, Stringer further elaborates that action research provides the means by which people in educational settings, business and community organisations may increase their effectiveness in the work they are involved in.

Each successive definition of action research presented earlier provides better and more detailed concepts of action research. In this study, the definition of action research defined by Stringer (2007) is used and the on-going processes of the research will be continued, monitored and improved beyond the time constraints of this study. This will consequently open up possibilities for future research, which may embrace other areas as well.
Action research characteristics

In addition to the previous definitions of action research, it is also necessary to highlight and identify its main characteristics. The four main characteristics inherent in action research are from Lodico et al. (2006) and will be expanded further:

- researcher’s educational settings and active participation
- collaboration
- improvement in educational practices
- several waves of data collection, reflection, and action

Researcher’s educational settings and active participation

Action research is commonly conducted in one’s own educational settings, such as a classroom, a school, district, or even community program and the researcher has an active role in carrying out the research, ensuring that the research is based in the reality of everyday educational practices. In this study, the educational scope is limited to higher education in one institution.

Collaboration

Action research is conducted on the basis of collaboration from many perspectives so that the research can provide rich data to enhance the credibility of the research. In this study, the collaboration is limited to the researcher’s colleagues (the teaching partner and the writing coordinator) and the students who were involved in the research as participants.

Improvement in educational practices

The main objective of action research is to improve educational practices, which range from simple tasks such as changing an assignment for the next school year to complex tasks, such as changing a national educational policy. In this study, the main
objective of the action research was to provide better online facilities to teach an EFL writing course in a hybrid learning environment. Indeed, action research has the advantage of being able to be applied at all levels and in all areas of education ranging from its smallest scope on individual levels to its largest representation to reach a community level (Gall et al., 2005; Stringer, 2004, 2008), as illustrated in Figure 3.1.

Several waves of data collection, reflection and action

Data collection can be iterated several times because the researchers are actively involved in this educational setting and the research itself continues beyond the initial data collection. With different kinds of data collected, more reflection is also needed to interpret the data. This consequently affects the different kinds of actions taken. The power of action research lies in its iterative cycles because, by doing so, the researchers can advance beyond their knowledge gained to understand the issues at hand (James, Milenkiewicz, & Bucknam, 2008). These iterative cycles, however, are likely not to follow a linear process (James et al., 2008; McIntyre, 2008). Rather, the researchers tend
to go back and forth between diagnosis and action until the implementation of new ideas is concrete enough to measure (See Figure 3.2).

As stated earlier, action research supports the professional development of the researchers in carrying out their research in a systematic way, interpreting and applying research findings (Gall et al., 2005; Johnson, 2005). It is thus evident that the purpose of action research is primarily to determine what is occurring in a particular setting, how something affects the participants and/or professionals in that context and why something occurs in such a way.

**Basic action research cycles**

Coats (2005) proposes a basic action research process, which constitutes a cyclic process of development in action research in the forms of planning, acting, observing, and reflecting (PAOR). The same cycle continues until the practice reaches its desired level, as visualised in the following diagram (Figure 3.2).

Cycle 1

![Cycle 1](image1)

Cycle 2

![Cycle 2](image2)

Source: Adapted from Coats (2005, p. 5)

*Figure 3.2 The recursive PAOR cycle of action research*

Within this most basic cycle of action research, according to Masters (1995), there are four basic themes, which cover the following aspects: empowerment of participants,
collaboration through participation, acquisition of knowledge and finally social change. Similarly, Creswell (2005; 2008) maintains that action research helps researchers by:

- encouraging change in the academic settings,
- fostering a democratic approach to education,
- empowering individuals through collaboration on projects,
- positioning educators as learners who seek to narrow the gap between practice and their vision of education,
- encouraging educators to reflect on their practices, and
- promoting a process of testing new ideas.

Action research was adopted as the research design for this study, thus the researcher was involved in the study himself. In that way, he could obtain first hand information from the study. In the process, the students were encouraged to work collaboratively both face-to-face (F2F) and online. By working collaboratively, the students were able to share what they had done and this would contribute to their knowledge building and, as a result, successful learning might have taken place along the way.

**Action research cycles used in this study**

Due to the limitation of time to conduct the research, only two cycles of planning, acting, observing and reflecting (PAOR) were implemented in the research. The cycles, together with the details of the research procedures, are summarised in Table 3.1.
Table 3.1

*Application of PAOR Model of Action Research*

### Cycle 1

<table>
<thead>
<tr>
<th>PAOR Cycle of Action Research</th>
<th>Research Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Investigating and devising how the scaffolding can be implemented in the research.</td>
</tr>
<tr>
<td>Acting</td>
<td>Applying the scaffolding in the teaching-learning activities.</td>
</tr>
<tr>
<td>Observing</td>
<td>Analysing the impacts of the data gathered in cycle one.</td>
</tr>
<tr>
<td>Reflecting</td>
<td>Based on the feedback gathered, adjustments are added to improve the quality.</td>
</tr>
</tbody>
</table>

### Cycle 2

<table>
<thead>
<tr>
<th>PAOR Cycle of Action Research</th>
<th>Research Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Investigating and devising how to implement the adjustments suggested in cycle one.</td>
</tr>
<tr>
<td>Acting</td>
<td>Applying the improved scaffolding processes in the teaching-learning activities.</td>
</tr>
<tr>
<td>Observing</td>
<td>Analysing the impacts of the data gathered in cycle two.</td>
</tr>
<tr>
<td>Reflecting</td>
<td>Based on the feedback gathered, more adjustments are added to improve the quality in the future.</td>
</tr>
</tbody>
</table>
Participants

The participants of the study were mainly the first year (B.A. equivalent) students enrolled in the ‘Effective Writing’ classes at the English Department, Faculty of Education, Universitas Pelita Harapan, conducted in the second semester of the 2006-07 academic year (January–May 2007). Some of these students were repeaters, consisting of three students who were from batch 2004 and four students who were from batch 2005.

There were two classes, Group A (consisting of less able and five new students who joined in the English Department in the second semester) and Group B (consisting of more able students), offered in that even semester with a total number of forty students. Two students decided to withdraw from the course. So, altogether there were thirty-eight active students in the ‘Effective Writing’ classes. Each session took place for one hundred minutes. The researcher taught Group A and his colleague taught Group B. When the research was conducted, there was a change in the writing curriculum. For that reason, the course outline was adjusted to meet the new demands.

Since it was thought that heterogeneous groups would represent a true picture of an ideal classroom, after the mid-term test, these groups were restructured with the hope that more able students would facilitate the discussions and help the less able students to construct their knowledge together in this learning community. This restructuring of the groups was done for both the F2F and online activities. These new groups provided ample opportunities for the able students to apply the scaffolding processes to their less able peers.
Instruments

Several data-collecting methods have been used to gather the data in this study. The data collected are listed as follows:

- **Six classroom observations** were conducted by the teachers to record what was going on in the classroom.

- **Personal reflection** was done throughout the entire research process but particular attention was given after each cycle for theory building.

- **Teaching coordination sheets** were used because there were two different ‘Effective Writing’ classes. In that way, the activities done in each class could be somehow synchronised by the two respective teachers.

- **Two questionnaires** were distributed to ten participants who were purposely chosen on the basis of their active participations in the online activities for the first four weeks. Five participants were chosen from Group A and another five participants were chosen from Group B. The original questionnaire was done in cycle one and the other, the revised one, was done in cycle two.

- **Two in-depth interviews** were carried out to collect detailed data from the same ten participants doing the questionnaires. However, one participant from Group A refused to participate in the two in-depth interviews. Each of these two in-depth interviews was conducted after the participants completed each of the questionnaires respectively. The first in-depth interview was done in cycle one and the second one, the revised one, was done in cycle two.
• **Online records**, consisting of the **chat sessions** (synchronous) and **threaded discussions** (asynchronous), were archived for analysis to see if the students had used their meta-cognitive skills in building their knowledge, particularly in the applications of the four types of scaffolding (i.e., expert scaffolding, reciprocal scaffolding, self-scaffolding, and post-instructional scaffolding).

The researcher was fully aware that there might be some weaknesses as well as some strengths associated with each of the data collection methods. However, the different sources of data act to complement one another, not only enriching the data collected, but also allowing for triangulation to occur to achieve positive results by minimising the distortion of the data collected (Baumfield, Hall, & Wall, 2008; Hesse-Biber & Leavy, 2006; James et al., 2008; Johnson, 2005).

In addition, in order to ensure the validity, rigor and authenticity of the research findings, an analysis of the data collection matrix adopted from Marshall and Rossman (2006, p. 133) was used as an instrument to evaluate the methods of data collection utilised in the study. The outcomes of this analysis can be found in Table 3.2.
Table 3.2

**Strengths of Data Collection Methods**

<table>
<thead>
<tr>
<th>Method/Activity</th>
<th>Interview</th>
<th>Participant Observation</th>
<th>Artifacts</th>
<th>Questionnaires and Surveys</th>
<th>Online Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fosters face-to-face interactions with participation</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Useful for uncovering participants’ perspectives</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data collected in natural setting</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitates immediate follow-up for clarification</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good for documenting major events, crises, conflicts</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Useful for describing complex interactions</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good for obtaining data on nonverbal behaviour and communication</td>
<td>x</td>
<td>D</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides context information</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitates analysis, validity checks, and triangulation</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitates cooperation</td>
<td>x</td>
<td>D</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May draw on established instruments</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expands access to distant participants</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: x = strength exists; D = depends on use

Source: Adapted from Marshall & Rossman (2006, p.133)

**Procedure and timeline**

In this study, the data collection schedule was carried out as outlined in Table 3.3.

Table 3.3

**Summary of the Data Collection and Schedule**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Cycle 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Classroom Observations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Questionnaire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>In-depth Interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Artefacts</td>
<td></td>
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= Cycles in action

= ongoing activities
As is indicated in Table 3.4, this study proceeded in two (2) cycles:

- Cycle 1: Initial Investigation
- Cycle 2: Second Investigation

**Table 3.4**

*Action Research Cycle, Phases, and Steps*

<table>
<thead>
<tr>
<th>Activities</th>
<th>Week 7-8</th>
<th>Week 9-11</th>
<th>Weeks 12</th>
<th>Week 13</th>
<th>Week 14</th>
<th>Weeks 15-17</th>
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<tbody>
<tr>
<td><strong>Cycle 1:</strong></td>
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<tr>
<td>Initial Investigation</td>
<td>F2F Mode:</td>
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<td><strong>Online Mode:</strong> (only in Week 7)</td>
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<td>Phase 2</td>
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<td><strong>Cycle 2:</strong></td>
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<td>Second Investigation</td>
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<td>Movie viewing</td>
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<td>Post-instructional</td>
<td>Online Mode:</td>
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<td>Phase 1</td>
<td>Phase 2</td>
<td>Building</td>
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**Cycle 1: Initial investigation**

Cycle one was conducted in week seven in that semester (See Table 3.3). It provided both the teacher and the students with a chance to experience what it was like
to be involved in the study. However, this situation was not really new to the students because they had been doing similar activities beforehand in their day-to-day teaching-learning atmospheres.

After cycle one, the students were given ample opportunities to enrich their learning experiences along the way because the researcher always tried to provide similar learning situations and conditions. By doing so, both the researcher and the students were more familiar with the steps to be taken so that when cycle two was executed in week twelve, the students were able to perform much better in responding to the instructions given. The same teaching style was maintained in the two classes until the end of the program in May 2006.

This cycle of the study proceeded in two (2) phases:

- Phase one: Face-to-Face (F2F) mode
- Phase two: On-line mode

**Phase 1: Face-to-Face mode**

The face-to-face mode started this phase. Within these conventional teaching-learning activities, there were five steps to follow and these were (1) self-scaffolding, (2) expert scaffolding, (3) reciprocal scaffolding, (4) self-scaffolding and (5) post-instructional scaffolding. Within each step, a particular scaffold, following Holton and Clarke’s (2006) scaffolding, was administered. By doing so, the teaching-learning processes and their outcomes could be analysed and monitored closely through these scaffolds.
Step 1: Self-scaffolding (pre-instructional)

This is the first activity that the students were involved in before the actual teaching-learning processes began. As a result, this activity was termed as pre-instructional. At this stage, the students were given a short written quiz for about five to ten minutes to reflect on what they knew about the topic to be discussed on that day. They were given a few key relevant questions to start with. Any questions could be used as an ice-breaking activity.

This activity gave the students a chance to measure their current levels of understanding as well as to recall all types of information related to what it was that they needed to know so that they would be more prepared to move on to the next step, the expert scaffolding.

Step 2: Expert scaffolding

During this stage, the teacher provided the students with the necessary background knowledge for a certain topic to learn (e.g., the process essay). All the teaching techniques, beside the teaching material already provided in PowerPoint ® presentations, were utilised to deliver the content to the students. This expert scaffolding was carried out for approximately thirty minutes.

The students, on the other hand, were receiving the information transmitted. After that, the teacher required the students to ask questions, if any, to clarify any confusion or to start constructing their knowledge at its preliminary stage by allowing them to participate in the reciprocal scaffolding.

Step 3: Reciprocal scaffolding

After the students were enriched with the background knowledge from the teacher via expert scaffolding in Step 2, they were immersed in the reciprocal scaffolding by
discussing high-order thinking questions with their peers in groups of four. This activity became important when the students were able to construct their knowledge together in a social setting within the classroom.

In this way, they transacted their knowledge. It was through these collaborative activities with other students that they had a chance to gradually internalise their capabilities. More capable students could provide a sort of ‘expert’ scaffolding to their less capable peers. Any relevant questions for peer discussions could be introduced on this occasion.

After the discussions, the students were expected to present their brief oral reports in front of the whole class and they would receive feedback either from the teacher or from the other peers. This reciprocal scaffolding lasted for sixty minutes.

*Step 4: Self-scaffolding*

This scaffold, which occurred after the regular teaching class hours, was important in the consolidation of the knowledge that the students had constructed in the classroom earlier. Outside the regular class hours, they were encouraged to reflect on what they had learned beforehand.

In case they needed to find further information related to the materials covered in the classroom, they could find it anywhere they liked, for example, by exploring the Internet for other sources, sending emails to their peers or their teachers for further clarification on different topics, and within themselves, by trying to conceptualise or reconceptualise what they had encountered until they were satisfied with their current understanding of a certain topic.
This type of scaffolding was also apparent while students were writing their assignments, during which time they were trying to improve them by adding and deleting the texts related to certain concepts. In other words, they were trying to conceptualise and reconceptualise within themselves. They were also expected to summarise what they had learned and to figure out what future implementations were applicable in different settings.

*Step 5: Post-instructional scaffolding*

This type of scaffolding, which also took place outside the regular teaching hours, was likely to be the most important part of the scaffolds so far. By this time, assuming that they had been acquiring sufficient background knowledge in a particular area, the students had already experienced the three types of scaffolding (i.e., expert, reciprocal and self-scaffolding). For that reason, they were expected to be able to do something beyond that, for example, sharing the knowledge they had acquired by helping other students solve their problems. Alternatively, they were encouraged to be able to give constructive feedback to someone else’s work or revise their own work based on the feedback they had received from their peers.

At this stage, they might have been able to soundly judge for themselves whether what they had done was appropriate or not. It was in this type of scaffolding that they would be able to project or extend what they had learned into something meaningful in their everyday lives, by putting the theories into real practice. When the students reached this stage, it was expected that the processes of expert, self, reciprocal scaffolding had been inherent in them. The higher the stages were, the more control the students would have upon their learning. Figure 3.3 sums up the face-to-face scaffolding process:
The arrows with broken lines in Figure 3.3 represent the interactivity of the scaffolding processes happening outside the carefully-scaffolded instruction, which is termed as chaotic creativity, and as the name suggests, the scaffolding processes/sequences do not follow a linear fashion. The same arrows with broken lines are used to describe this condition in Figure 3.4.

**Phase 2: Online mode**

Initially, the online mode occurred during the same week after the teaching-learning activities had been completed in the classrooms. However, due to bad Internet connections, the online mode was completed seven times. This online mode was basically a kind of reinforcement for them. There were four steps altogether in the online mode and these were (1) expert scaffolding, (2) reciprocal scaffolding, (3) post-instructional scaffolding, and (4) lifelong learning. It is worth mentioning that the self-scaffolding was not included in the online mode due to the limited time of the online
activities, which lasted for around thirty minutes for each group. With this short period of time, self-scaffolding may not be appropriate as, in order to be effective, self-scaffolding may require some high-order thinking involved in the process.

In this online mode, the students were asked to log on to TappedIn ® where online facilities were provided and managed. By this time, the students had ideally accumulated sufficient background knowledge on a particular topic, for example the process essay, to move on to becoming engaged in on-line activities. In order for the students to actively engage in the online activities, a high percentage of the assessment tasks (50%) were embedded in the tasks.

Step 1: Expert scaffolding

The students were encouraged to log on to TappedIn ®. This scaffolding was in the form of online artefacts which supported the F2F teaching-learning activities. There were many documents provided online to guide the students in order to succeed in their learning journeys such as the course outline, guidelines, marking procedure, teaching materials (already delivered face-to-face), questions for discussion, samples of good pieces of writing, and possible websites to visit to improve their knowledge and writing skills. Ideally, this site had been visited by the students before the students were engaged in Step Two so that they were ready to discuss the questions.

Step 2: Reciprocal scaffolding

In this type of scaffolding, the students were involved in a moderated chat session. The time allocated for this was thirty minutes each time. During this time, the students were given an opportunity to discuss or solve problems which had been posted on the website beforehand. The teacher acted as a moderator and left the chat session after the allocated time was over but the students were allowed to continue on their own.
All transcripts were automatically sent by TappedIn® to the students’ email addresses soon after they logged out so that the students could review and analyse what they had been discussing. Besides that, the students were also encouraged to work together asynchronously in the form of moderated threaded discussions. Either the teacher or the students could start the discussions. Each student was encouraged to make contributions for their feedback given to their peers.

**Step 3: Post-instructional scaffolding**

In this step, the students were expected to actively scaffold their friends by providing expert scaffolding for their peers. The ones providing expert scaffolding might have benefited from this activity by consolidating and enriching their knowledge. Alternatively, based on their learning experiences, they were also able to give suggestions on what materials to read or which website to visit in order to improve someone’s knowledge. In this scaffolding, the students were actively helping their friends by sharing their knowledge together as a learning community.

**Step 4: Lifelong learning**

At this step, the scaffolding for that specific topic (e.g., the process essay) had been removed. The students had become independent or self-directed learners who could solve their own problems either by recalling the types of scaffolding they had once experienced or by using resources to continue learning on their own. As the ultimate goal of self-directed learning had been reached, the students could start constructing their future knowledge based on their experiences while applying the scaffolding theories they had encountered in their previous learning journeys. The boundary between the four types of scaffolding was not clear cut anymore during this step because the concepts of the four types of scaffolding were already embedded and inculcated in their lives. As also stated earlier in the F2F mode, as the students reached a higher stage in their
learning, they had more freedom to control their own learning, which can be summed up in Figure 3.4.

Cycle 2: Second investigation

Cycle two was conducted over a period of three weeks (weeks twelve, thirteen and fourteen), with a total time of two hundred minutes for the F2F mode conducted twice within the three weeks and sixty minutes for the online mode, also conducted twice. The second cycle had been modified based on the feedback received from cycle one (See Chapter Four). However, all of the scaffolding steps undergone in cycle one were basically repeated again in cycle two in order to maintain consistency in applying the scaffolding processes or actions. The students followed the same scaffolding procedures but they had a different topic to deal with. More importantly, based on the students’ feedback, in cycle two the online activities preceded the F2F mode. This was carried out to provide a variety of teaching techniques to avoid boredom and monotony.
Chapter Three: Research methodology

The students also dealt with two different types of essays in the two cycles. In cycle one, they dealt with the process essay, while in cycle two, they dealt with the cause and effect essay. Since cycle two was conducted near the end of the course, the students might have been proficient enough to carry out the expected tasks at hand. The different types of essays might not have affected the process of scaffolding.

This second cycle allowed the students to be really absorbed in the learning activities. There was no simulation prior to the implementation of cycle two. It was assumed that every student was quite familiar with the new learning style implemented, in which they had to apply the four scaffolding processes.

In week twelve, they were asked to go online and discuss the characteristics of a cause and effect essay. In week thirteen, they had a chance to see a movie entitled *Hiroshima* and were asked to write down the effects after the bomb was dropped on that city. Then, in week fourteen, they were asked to produce their cause and effect essay, which they posted online later, focusing on the effects only because the movie focussed more on the effects. Cycle two will be elaborated in Chapter Four.

Data analysis method

Discourse analysis is a way of understanding social interactions. The analysis for this study will proceed by trying to identify themes in what students say when learning English online. By looking at each utterance, the researcher asks whether particular themes can be abstracted about what is being said in each context. In the discussion of the findings, the themes abstracted are collated and reported on. In doing so, it is usual to cite from the transcription examples (see Chapter 5).
The data analysis in this study was based on four steps, namely: data preparation, data exploration, reduction of data and interpretation of the data (Hesse-Biber & Leavy, 2006). First, the data collected were organised chronologically by topic. The main focus of the data was then categorised and isolated in order to synthesise and integrate them accordingly. The classification of the data was carried out to find particular patterns. Finally, the themes and theories, which emerged, were drawn and developed once the data had been analysed extensively. The summary of the data collection and interpretation, as proposed by Hesse-Biber and Leavy (2006), is presented in Figure 3.5.

![Figure 3.5 Steps in data analysis and interpretation: A visual mode](image)

Source: adapted from Hesse-Biber and Leavy (2006, p. 358)

After the data were classified and theories were drawn, discourse analysis was used to analyse the data, where the students have come to their understandings through the discussions they conduct in their online activities. Vygotsky (1986) believes that language plays an important role in knowledge construction. This is supported by Gee (2005), who argues that language has two functions: “to support the performance of social activities and social identities and to support human affiliation within cultures,
social groups and institutions” (p. 1). He further proposes that language has a magical property in that what is spoken and written is designed to fit the situation for communication but at the same time how the language is spoken or written creates that very situation. Thus, through discourse analysis, it can be assumed that the level of students’ understandings can be determined.

Chapter summary

The action research design used to approach this study has been discussed. In this research methodology, the rationale, definitions, and characteristics of action research have been presented and analysed. The basic action research cycles have been introduced and the action research cycles used in this study have been described in detail to provide the steps taken in the implementation of the research. The participants, instruments as well as the procedure and timeline have been covered. The method of analysing the research data has also been explained. In the following chapter, the observations and reflections on the two cycles in this study will be presented.
CHAPTER FOUR: OBSERVATIONS AND REFLECTIONS ON THE TWO CYCLES

This chapter consists of the observations and reflections that the researcher made while conducting the research study. All of the names used in this chapter and onwards are pseudonyms in order to maintain the secrecy of the identities of the research participants. More detailed information is presented in each cycle to provide a wider context to understand the study as a whole. For that purpose, this chapter is divided into three sections: cycle one, cycle two, and the summaries of the changes implemented in the second cycle. It concludes with a chapter summary.

**Cycle one**

In cycle one, the face-to-face mode preceded the online mode. The face-to-face mode was carried out within one hundred minutes, followed by the online mode conducted within thirty minutes each for both groups A and B. The online mode following the face-to-face mode was in the form of a chat session since it represented the real-time teaching-learning activities happening in the classroom. The chat session was also aimed at reinforcing what the students had covered in the face-to-face session. All of the students were encouraged to take part in the online session. However, not all students were able to go online due to the slow Internet connection. In cycle one, fifteen students joined the chat session.

Since each face-to-face session was one hundred minutes and in order to comply with the changes made in the curriculum, cycle one was continued in the following week with the same scaffolding patterns but without the online mode. The total time allocated
for conducting cycle one was two-hundred minutes (consisting of two face-to-face sessions in two consecutive weeks) and thirty minutes (consisting of one chat session).

**Face-to-face mode**

The face-to-face mode in cycle one was conducted in week seven and continued in week eight. The topic discussed on those two occasions was process essays. Initially, the classes were combined and the students were introduced to some effective ways of using ‘track-changes’ provided by Microsoft Word. They were expected to use this facility to help each other in their writing activities. Many students admitted they had never used this before.

After that combined session, they were separated into their respective classes and started the lesson for that day. As usual, they were given the ten-minute quiz related to the lesson they were going to deal with on that day. This was the first scaffolding, or self-scaffolding, employed in the teaching-learning activities. Then, the lecturers provided expert scaffolding for the next thirty minutes to the students by dealing with the PowerPoint ® materials on the process essays, presented on a Liquid Crystal Display (LCD) projector. After the explanation, the students were given a chance to re-read the sample essay, entitled: ‘How to complain’, in which steps of making a complaint were introduced in the essay. This sample essay was also provided online and could be accessed anywhere, anytime. The students had been asked to read this sample essay beforehand. After the student finished re-reading the sample essay, the lecturers explained the structure of the essay–another type of expert scaffolding.

Subsequently, the students were asked individually to choose a topic of their own and make the first draft of their simple outline. After some time, they were divided into groups of four and asked to discuss in pairs the outline they had created. This was the
time when the students had a chance to engage in reciprocal scaffolding. More importantly, they were also encouraged to provide constructive comments or feedback on their friends’ outlines, for example, to give suggestions as to how to improve each other’s paragraphs. In this case, the students were given opportunities to extend the knowledge they had constructed before by sharing it with their peers. For this purpose, the students were given the remaining sixty minutes.

At the end of the class, they were given an assignment to write their essays and bring them in the following week (week eight) for further discussions. Apart from that, the students were also asked to carry out some self-scaffolding by finding relevant sources to improve their writing skills. They were reminded not to change the topic they had chosen to write about.

In week eight, after the ten-minute quiz, the lecturer started with the expert scaffolding by reminding them of the characteristics of a process essay. Some of the topics discussed in the chat session were also touched on. Then, they were requested to engage in reciprocal scaffolding by correcting each other’s work using the track changes facility. After that, they were also asked to record their comments using the feedback form provided. Both activities basically provided the students with the practice of applying self, reciprocal and pseudo-expert scaffolding. Later, based on the received feedback, they were expected to improve the essay before it was submitted conventionally on paper in the following week (week nine). Before doing the final revision, they were also encouraged to apply self-scaffolding by searching for more related information online, not only to reinforce what they had learned in weeks seven and eight but also to improve the quality of their process essays. Once again, they were also reminded not to change the topic they had chosen to write about.
The self-scaffolding was conducted outside the regular class hours. The students were expected to search for more relevant information to improve their knowledge via their online search or online discussions. The post-instructional scaffolding was also accomplished outside the normal teaching hours. The post-instructional scaffolding referred to activities which facilitated the students to extend their knowledge to themselves or other people.

The breakdown of the face-to-face mode was as follows:

Within the classroom:

- Self-scaffolding (pre-instructional) : 10 minutes
- Expert scaffolding : 30 minutes
- Reciprocal scaffolding : 60 minutes

Outside the regular teaching hours:

- Self-scaffolding (post-instructional)
- Post-instructional scaffolding

*Online mode: chat sessions*

The online mode, or the chat session, in cycle one was conducted in the following evening in the same week (week seven) after the face-to-face mode was conducted. The students were asked to go online from 20:00–20:30 for Group A and from 20:30–21:00 for Group B. The topic for the online discussion was ‘The process essays: your tips and suggestions.’ The lecturer started with the expert scaffolding by asking questions to stimulate discussions. It was found that they had difficulties in differentiating between
example essays and process essays. However, after some further interactions between
the lecturer and other students, more students began to understand the differences.

In the later session, reciprocal scaffolding was provided by making the students
engage in online discussions with their peers. With this online mode, the scripts could be
studied again because after the chat session, everyone joining in the chat session would
be given a copy of the script. Alternatively, they could find other resources to construct
their knowledge.

The breakdown of the online mode was as follows:

- Expert scaffolding
- Reciprocal scaffolding
- Post-instructional scaffolding
- Lifelong learning

The interview

The first interview was conducted for approximately thirty minutes with each
participant. They were audio-recorded. The whole week was spent on interviewing the
nine students individually. Initially, the students felt unfamiliar with the interview
sessions but as the interviews progressed, they began to feel more comfortable with the
situation.

In the first interview, none of the students could remember the concepts of
scaffolding although they were explained in the first meeting of the semester. Some of
them pretended to know but when they were asked further, they admitted they had
forgotten. However, they managed to describe each concept and even provided relevant
examples. The researcher spent the first few minutes explaining what the scaffolding
concepts were all about once again. Once they managed to grasp the ideas, the researcher asked them to mention the four types of scaffolding under investigation and when they were able to do that the researcher continued the interview.

After the interview, the researcher decided to include the topic of scaffolding in the threaded discussion in the hope that they would be able to explore more. The researcher asked them to find any scaffolding websites, hoping that they would be familiar with scaffolding and would apply it in the ‘Effective Writing’ classes and somewhere else and that in the second interview they would be able to explain it more deeply.

In the first interview, some students mentioned how difficult it was to provide peer-reviews although they found this activity useful. They were not sure as to whether it was right or wrong. In that case, making it more objective would make them feel more comfortable. In the first interview, too, some students mentioned that it was their first time to do peer-reviewing.

**The questionnaire**

The first questionnaire was divided into several sections, covering general questions. All of them were designed using Likert scales. At the end of the questionnaire, the students were asked to express their general comments. As the researcher was reflecting on theory building, he was thinking that it would be better to provide open-ended questions in the second questionnaire so that he could further explore the students’ knowledge and perceptions about scaffolding and about EFL essay writing based on the open-ended answers the students would provide.
Emerging themes during cycle one

Based on the analysis of data from the classroom observations, interviews, questionnaires and discussion forums, the following three major sets of themes about how to optimise the functioning of the hybrid learning environment emerged during cycle one:

(1) Themes about how the hybrid learning environment enhanced student learning

(2) Themes about changes to students’ perceptions related to roles of teachers/students as learners

(3) Themes about challenges that needed to be addressed

Themes about how the hybrid learning environment enhanced student learning

Two different sub-themes about how the hybrid learning environment enhanced student learning emerged from the analysis of data during cycle one: (a) different and unique learning experiences and (b) blogging.

Different and unique learning experiences

With the hybrid learning environment in place, the students experienced mixed feelings in their teaching-learning activities. Some students preferred the F2F mode and some others preferred the online one. Still, some others preferred the combination of both F2F and online modes.

As this hybrid learning community was still new to all of the students, it provided them with different kinds of new and unique learning experiences. Some students admitted that these new types of learning experiences afforded by the hybrid environment facilitated their learning and their ability to create ideas and improve their
writing skills as they interacted with one another, particularly in the online mode. Furthermore, this hybrid mode also provided more social learning among the participants, where they could practise the theories they had constructed in the F2F mode and construct their knowledge together as a learning community. Many students found these opportunities of knowledge sharing really useful, particularly in the discussion forums, chat sessions and blogs. Beside that, the issue of online flexibility also introduced another positive aspect of this hybrid mode, where the students could access the materials anytime and anywhere. All of these sentiments about how the hybrid learning environment provided them with unique and powerful learning experiences are expressed in the following comments from four of the students:

“I think it is a unique experience in learning ‘Effective Writing’ by using TappedIn ®. We are trying a new style of learning, online learning. I want to say that TappedIn ® has helped me improve my writing skills. I also want to say thank you to our lecturers for teaching us... and also to all of my classmates... I hope all of us pass this class and meet again in the next writing class.”

“This writing class is a whole new experience for me because it’s got online activities now! It’s a bit hard to understand and to follow for me. Sometimes, it’s hard for me to download the materials although it’s interesting and I could get more information from this online class. Still, I have found it difficult to study without the teacher's handouts. Maybe, I’m still not used to it, to learn independently. Overall, it’s fun to learn online. I could get in touch with others and share more about my thoughts and everything else. Thanks.”

“Yes, of course! When we post something or join the chat sessions, we are actually practising our writing... The more active we are, the more improvement we will get... The lecturers also give us comments from our posts, so we’ll know what mistakes we have made and what the correct ones are...”

“First.. I want to say thank you to Mr. Agus who introduces this e-learning activity which is very helpful to improve my writing skills and create my ideas... Actually, this is a good activity for us to improve our writing skills and to have extra time to communicate with others... either from discussion forums, chat sessions, or blogs..."
I also like the way that materials are presented. It is easy to follow and we can get the materials anytime we want...That’s all...”

Blogging

Encouraging the students to create blogs further enabled them to construct knowledge as a learning community. Engaging the students in creating blogs also provided them with multiple opportunities to engage in self, reciprocal and post-instructional scaffolding at their own pace. It was worthwhile noting that for some of the students they experienced these blogging activities for the first time.

With these blogging activities, the students were free to determine what to do in their personal and social knowledge construction such as writing a reflective diary, posting a current event, or starting to discuss their writing problems. The researcher was also involved in the discussions in the blogs, particularly in providing moral support and guidance when the needs arose because the students asked for some assistance or guidance. Other times, when the students’ interests dropped, the researcher also intervened to make them more active again.

Twelve students created their own blogs and moderated the discussions there but only eight of them were willing to share their blogs with the learning community by inviting everyone to visit their blogs.

Themes about changes to students’ perceptions related to roles of teachers/students as learners

Three different sub-themes about changes to students’ perceptions related to roles of teachers/students as learners emerged from the analysis of data during cycle one: (a) paradigm shift of teaching/learning perspectives, (b) passive ->proactive transformation, and (c) metacognitive progress.
Paradigm shift of teaching/learning perspectives

Most of the students underwent a paradigm shift in their perceptions about the roles of the teacher/lecturer and their roles as learners during cycle one. Following a traditional view of learning, where the teacher is the centre of the teaching-learning processes (Novak, 1998), the Indonesian students initially thought that teaching/learning in the classroom only could happen in the presence of a teacher/lecturer. They apparently could not trust themselves to explore their own understandings of the world independently. They also assumed that teaching/learning was transactional in nature. Thus, if something was not assessed, it was not necessary to learn. Many of them also initially thought that since they had paid substantially for their education, it was the teacher/lecturers’ role to transmit knowledge for them to passively absorb. The hybrid mode made most of the students question their initial perceptions and deeply-rooted beliefs and adopt more proactive rather than reactive roles as learners. This is well exemplified by the following comments. Here, the students proactively ask the teacher/lecturer for guidance and also make suggestions about how the hybrid learning environment can be made to operate most effectively. Within Indonesian colleges, this rarely has occurred; generally, they just reactively follow what the teacher tells them to do.

“Dear Mr. Agus, I have a question. Are we supposed to list down the grammatical mistakes that we ourselves have encountered in the past on TappedIn®? (Therefore, we may want to go back and read each of our posts) Or are we supposed to list down others'? Because if that's what it is, it'll be a loooong list, Sir... I think correcting our own writings should be more effective for everybody.”

“This is for Mr. Agus: I totally agree with Karen. I think we should keep the discussion relevant for everybody.”

“That's it.. This topic has too many articles so that I’m too lazy to read them. Keep it relevant, Sir. I think “posting anything as long
Passive -> proactive transformation

It was also evident in the observations that some students were passive in the F2F mode but they became more active in their online activities, particularly in the discussion forums because they had a chance to discuss their problems with their peers, which they found more convenient to work with. As a result, they became more proactive in expressing their ideas as they were constructing knowledge together among their friends. Apparently, the peer pressure was less heavy when they expressed themselves online (cf. Bender, 2003; Kilpatrick & Bound, 2003; Stanton, 2005).

The online activities enabled the students to become more creative, critical and proactive because they felt more challenged to participate in the discussions by providing good reasons and opinions. More importantly, some of them became more confident in expressing their thoughts in the discussion forums because they found that they could help one another solve their problems. Indeed, these students experienced transformations in their learning journeys and became active contributors in the discussion forums, as depicted in the following excerpts:

“It's basically GREAT to share each other's knowledge with our friends. A good strategy to learn, Sir because sometimes it is more comfortable for us to ask our friends rather than our lecturers, whose time maybe limited for us.”

“Yeah! I've improved a lot of things (like, I could be more creative with the ideas that I have, and give good reasons and opinions) and it has also made me want to know more about everything. That's why this TappedIn® has made me become more active (obviously).”

“I think these class sessions are good and I get to feel comfortable to discuss the problems when we are shy to ask in class and it helps a lot even sometimes I didn’t join the discussion forums because I
forgot. Well, thanks to this class, I can get help in writing and expressing my thoughts."

“We can make everyone in the class join in group discussions by encouraging them or encouraging the group members in your group discussions. It would be useful because we can share our ideas, and help anyone who faces some difficulties. For me, I am challenged to answer some questions which are given to me. Furthermore, it makes me think critically…”

“It’s great! We could work together with our friends, share our knowledge with others. We could help each other and of course it will tighten our friendship, too! It’s a good way of learning. Each of us has to be active, which makes us more confident and talks more! Overall, it’s a great way to learn. Thanks.”

“O… ya, this section is very good for sharing anything about English. If you are smart, you can teach your friends. No need to be shy in this section if you want to be better with your English..”

Metacognitive progress

It was found that the students progressed metacognitively. They became aware of how to monitor and improve on their writing skills. They also began to become more cognisant of the scaffolding processes that they had been dealing with. Apparently, through monitoring their own progress, they were able to see themselves make progress. The students were also comparing the learning objectives with what they had been doing. More importantly, the students could also learn from their peers by analysing what they had been doing in their writing activities. They also realised that they could identify the mistakes they had made before. However, they still needed more time for consolidation and another skill to put the theories into practice, as described in the following scenes:

“Yes, I’ve tried the self and expert scaffolding in the READING lessons with my tutor...Real example: I know how to PARAPHRASE the statement into the simplest sentence without losing its original meaning.”

“Ahh, it’s great that you’re improving!! Keep up the good work...hehe Ani, remember the story that day, ‘Jimmy with
Karimun’? hehe I think that's one interesting topic for writing (sorry Jimmy >_< It’s funny, though) hehehe...Maybe, we can post the story here?! Maybe...hehe yeah grammar and vocab are some problems here! But, we can improve it, for example, reading books, or surfing the Web (looking through some English articles that you're interested in. Thanks.”

“I think it's both easy and difficult. Easy because everything we've learned showed up there and we're prepared to do it because of the exercises and blueprints you've given us. But, it's also difficult because we don't exactly know if what we've written is right or not because we've very little experience in doing writing like this...Overall, I think we all just hope for the best and also hope that what we've written is just what the lecturers asked for.”

“I admit I can understand better with this site.. After the class, at least I know the topic, and then I just see TappedIn ® for further information ^_^”

“Absolutely. It is unquestionable that writing improves as long as it is practised. Having TappedIn ® as a learning tool allows us to do just that. It has served its purpose as a bulletin and an online knowledge source at the same time.”

“Yes, Tappedin ® really helps to improve my writing skills. I'm able to read some others’ opinions, how they express their opinions and the most crucial is I can analyse the structure of their statements. So, at the same time I can learn both.”

“The group discussions give me more explanations about the topics that are being discussed in class and they encourage me to learn from my mistakes.”

Themes about challenges that needed to be addressed

Six different sub-themes about challenges that needed to be address emerged from the analysis of data during cycle one: (a) need for ‘new’ skills, (b) lack of self-confidence, (c) excitement and frustration, (d) discussion topics, (e) group management, and (f) problems with peer-reviews.

Need for ‘new’ skills

It was evident that in order for the hybrid learning environment to successfully facilitate the construction of knowledge, ‘new’ technical and search skills needed to be taught to the students. Included in these new skills were: how to use TappedIn ®, typing
skills, copying MS Word documents and pasting them to TappedIn®, critically reading online materials/hypertexts, finding the right information/screening information overload, online searching skills with appropriate key-words, online/web navigating skills, and using track-changes facilities for peer-reviews. With the new technical and search skills, the students were now able to improve and enrich their learning experiences.

Lack of self-confidence

Some students experienced lack of self-confidence in the hybrid learning community. Consequently, they always asked questions of their teachers/friends although everything was posted online. They were not sure about the information posted online and it was easier for them to ask their teacher/friends as they were being engaged in the F2F mode. Three students (Indah, Enriko, and Terry) initially refused to share their work online because they did not feel confident about sharing their work online.

This issue of lack of self-confidence was addressed by the teachers/researcher personally encouraging non-confident students to participate in the online activities. The researcher also provided positive feedback for these students to encourage further participation. However, despite all these efforts by the teachers and the researcher, one student (Ade) never logged on to TappedIn® throughout the semester.

Excitement and frustrations

The students became both excited and frustrated with the online mode. They became excited because it was provided the context for new learning styles, where they experienced new activities to express more ideas, get information and share their difficulties online. They were also excited about this new learning style because they could give suggestions or comments to their friends but at the same time.
Unfortunately, when the online discussions were too crowded, the students often became frustrated. Other types of frustration also were experienced by the students. Some of these students experienced some culture shock, whereas some others experienced some technical problems while being engaged in the online activities. They were also frustrated with the Internet connections and the big groups in the chat sessions and the discussion forums. This encouraged the researcher to put the students in smaller groups in the discussion forums. However, with the chat sessions, nothing could be done to immediately address these frustrations because TappedIn® did not enable simultaneous chatting. There was also a problem of wanting to write more but time was limited and the topics changed quickly and the texts moved up quickly, particularly in the chat sessions. The students’ frustration and excitement can be illustrated as follows:

“Yes, it can be a culture shock for someone who really doesn't know at all about computers and online styles.”

“I’m sorry if my writing is messy. There is something wrong with my keyboard, like I can’t use a comma, backspace and the others. I don’t know what’s wrong with it. Maybe, I have just broken it...”.

“Having chat sessions is a good way to get more information from others and share our difficulties in learning writing. So, others can give suggestions or comments about our learning systems. In other cases, like what I've said before...sometimes they are too "CROWDED" hehehe.....”

“I like the chat sessions, though I think the time is too short..because I can express my ideas more in here and I can ask so many questions about today's lesson if I don't understand..and if I can't see the lecturer, I can ask it here..because I don't feel too comfortable with F2F..hehe.”

“Yeah, I like it.. But I don’t like large the group discussions. I like small group discussions..”

“I think I like it...well, actually in the group discussions, we can write everything. My group lets the members write about the problems in ‘Effective Writing’ and we'll solve them together.. It's nice to have your friends help you.”
“Hello, Sir and Ma'am... I've been trying to use the Wi-Fi facility, but the connection is too bad. Finally, here I am, hopefully it will not be disconnected while I am using it.”

“Sometimes the bad connections make me a little mad because I can't join the TappedIn ®. I hate if this thing happens. I dislike it when I don't know what I should write about a topic in the discussions.”

“In the chat sessions, I always went blank what to write and when I wanted to write something, the topic was different again. Confusing...”

Discussion topics

In order to achieve the aim of utilizing the discussion forums to improve the students’ skills and knowledge in writing, the researcher found that he had to make three modifications to his original research plan. Firstly, information from the theoretical framework was overtly utilised to scaffold their writing activities. Secondly, as they were becoming more engaged in the discussions, more interesting and controversial topics, which provoked debates or pros and cons, were utilised to stimulate more quality social interactions (See Table 4.8). The different topics were also intended so that the students could creatively assess problematic issues and think critically from different perspectives. It was always encouraged in the classroom that they should think critically and creatively to respond to the online discussions. Finally, since the students needed to be made aware of the scaffolding processes, some scaffolding questions such as ‘order of scaffolding’, and ‘scaffolding sites needed’ were included and posted online for discussions. Additionally, other research-related questions such as ‘F2F or online’, ‘group discussions’, and ‘online=culture shock’ were also covered to provide a variety of question types. However, in dealing with the questions on scaffolding, the students seemed to understand the concepts but were unable to name the scaffolding concepts presented in the first meeting. For that reason, they needed to be occasionally reminded of the scaffolding concepts both in the F2F and online modes. A student’s online indirect
enquiry on scaffolding and its reply are described in the following exchange of dialogues:

_A student’s indirect enquiry on scaffolding:_

“For the last two weeks, I’ve learned about how to make a good outline, and build my knowledge by discussing my outline with my friends (I forget the name, "??????" SCAFFOLDING). Then, I’ve learned about the "example essay".”

_Lecturer’s reply:_

“Well...about scaffolding....it is very important. There are four types, namely: EXPERT, RECIPROCAL, SELF AND POST-INSTRUCTIONAL. Download the file about scaffolding in the scaffolding folder if you want to know more. Everything is provided online, just explore them.....:-)"

**Group management**

During cycle one, it was deemed necessary to restructure the groups. Based on the policy of the Department, the students were initially grouped in homogenous classes, where students with the same average skills or competence were grouped in the same classes. As stated earlier, Group A represented the one with less able students and Group B represented the one with more able students.

In order to improve the quality of student interactions, the homogenous classes needed to be changed to heterogeneous ones. The new groups provided a conducive environment for the more able students to help the less able ones in the reciprocal scaffolding and post-instructional scaffolding. These ‘take and give’ learning processes thus provided for more vibrant interactions among the learning community members.

To enhance and expand student learning even further in the hybrid learning environment, in the online asynchronous mode it was found that the students needed to be put in smaller groups so that they had more opportunities to construct their knowledge
online. It was also found necessary to appoint a facilitator in each group. The facilitators were chosen from a mixture of able and less able students to provide equal opportunities for them to moderate the discussions.

The idea of having smaller groups meant that the researcher was required to provide less control and, on the other hand, the students had more control to conduct their online activities by providing self, reciprocal and post-instructional scaffolding. Without the researcher being in control, the students were able to engage in reciprocal and self-scaffolding with the online materials and to provide post-instructional scaffolding to other friends.

The students took the advantages of learning many aspects in these smaller groups. Some students found the smaller groups beneficial because they could explore freely, choose their own interesting topics, discuss the topics in smaller environments, participate actively in the discussions and help one another with their problems. They also found the idea of having a facilitator in the smaller groups useful in helping them solve their problems. They began to understand the meaning of interacting with other people to care for one another and construct knowledge together. The following examples reflect the students’ comments on the smaller groups.

“It is better but the opinions and ideas must be just a few because we discuss the topics in a small environment. Sometimes, it is hard to match the different opinions among us. It is better because we can choose our interesting topics, give ideas of making a story.”

“I think it is good for me to learn how to interact with other people. The idea of providing a facilitator is good because the facilitator gives me an idea to write a story... It is useful for me.”

“It can be useful if the facilitator and the members participate actively.”

“Good. I think the facilitators can help a lot. Furthermore, in a smaller group, we can care for each other.”
“I think this is a good idea because with the smaller groups, everyone can explore everything freely and, of course, the facilitator always helps her/his friends who are facing problems. For me, the smaller groups are very useful.”

“Yeah, I like it. But I don’t like large the group discussions. I like small group discussions.”

“I think I like it...well, actually in the group discussions, we can write everything. My group lets the members write about the problems in ‘Effective Writing’ and we'll solve them together. It's nice to have your friends help you.”

“Hello, Sir and Ma’am... I've been trying to use the Wi-Fi facility, but the connection is too bad. Finally, here I am, hopefully it will not be disconnected while I am using it.”

“Sometimes the bad connections make me a little mad because I can't join the TappedIn ®. I hate if this thing happens. I dislike it when I don't know what I should write about a topic in the discussions.”

“In the chat sessions, I always went blank what to write and when I wanted to write something, the topic was different again. Confusing...”

**Problems with peer-reviews**

Peer reviewing was proved to be difficult for many of the students. It was probably their first time to provide peer-reviews. In providing the peer-reviews, more able students were apparently more rigorous in providing constructive feedback and highlighting the mistakes they had found, whereas less able students tended to compromise by only highlighting the good things. They were not confident enough to highlight the mistakes that their friends had made or to determine whether a piece of writing was good or not. Still, some other students confessed that they did not even know what to write in the peer-review forms. As a result, a more objective system of grading with a grading scale needed to be established. The problems with peer-reviews are documented in the following online comments from three of the students.

“Oh ya, Sir.. I have a question.. you said that we have to comment on others’ work, right? Actually, I like to read others’ work and
respond but when I find there are some mistakes in others’ work I get doubtful to give comments because my work definitely has some mistakes, too. So, it’s like a dilemma for me. [Other students, please give comments] ;p”

“... and I learned to work with my group, doing peer-review ^^ It was fun! We could help each other. Thank you all for your help. but I’m still a bit confused what to write in that peer-review paper, though. Thanks”

“Well, I should post my C&C essay writing but it must be the best one because I didn't do it last week and my friend can't check whether it's good enough or not.”

Cycle two

Cycle two started with the online mode. It was done in this way due to the comments made by the students in the interview sessions and questionnaire in cycle one. Some students suggested having a variety of teaching techniques to avoid boredom. Cycle two was conducted over three weeks to meet the students’ demands, as a result of that.

The students were involved in the online chat session with the topic of ‘the characteristics of a cause and effect essay’. Seventeen students took part in the first chat session. After this online chat session in week twelve, the students watched the second part of a movie, entitled Hiroshima in week thirteen. The movie, with an approximate duration of ninety minutes, described how the atomic bomb was dropped over the city of Hiroshima and the terrible results in the aftermath of the bombing. The whole teaching session was dedicated to watching the film. Meanwhile, the students were asked to write down the important details arising from the movie which could then be developed into an interesting cause and effect essay.
On the following evening, the students were requested to go online again to reflect on their problems and solutions with their cause and effect essays thus far. Nineteen students joined this second chat session and were also encouraged to moderate this chat session. In the following week (week fourteen), they attended the F2F mode as the continuation of the online mode. The total time allocated for conducting cycle two was two-hundred minutes (consisting of two face-to-face sessions in two consecutive weeks) and sixty minutes (consisting of two chat sessions).

**Online mode: chat sessions**

Since cycle two was conducted over a period of three weeks, and the students were more familiar with the chat session, they had a chance to do the online mode twice. In the first online mode (week twelve), the students discussed the characteristics of cause and effect essays to equip themselves with the necessary information before they watched the *Hiroshima* movie in class in week thirteen and in the second online mode, conducted on the same date later in the evening (also in week thirteen), the students reflected on their problems and solutions with their cause and effect essays. It was in this second online mode that the students moderated this chat session for the first time. They were assumed to have collected enough information on the cause and effect essays and to be ready to post-instructionally scaffold their friends.

The lecturer’s involvement in the chat sessions during the second cycle was increasingly withdrawn because the students were given a chance to moderate the discussions. This last chat session was entirely moderated by the students, with the lecturer functioning as a member of the community, scaffolding the moderators to scaffold their peers.
**Face-to-face mode**

In the face-to-face mode, conducted in week fourteen, the students started with the ten-minute quiz. After that, more time was dedicated to the expert scaffolding by the lecturer to provide general comments to the students’ cause and effect essays. The students were then given some time to discuss ways to improve their essays with the lecturer personally. At the same time, they were also encouraged to discuss their essays in pairs by using the track changes facility in the classroom. They were asked to bring their laptops and swapped their work. Finally, before the class ended, the students were asked to submit the final products of the cause and effect essays online in week fifteen.

**The interview**

In the second interview, the researcher focused more on the questions related to the four types of scaffolding that had been introduced previously. Surprisingly, once again none of them could remember the names of the scaffolding types. However, they managed to describe what each type of scaffolding was about. They were also able to provide correct examples. A few minutes before the second interview ended, the students were asked to explain the scaffolding concepts once again using their own words and they seemed to be able to do that more successfully.

**The questionnaire**

The questions in the second questionnaire included some open-ended questions and focused on both the F2F and online activities carried out during cycle two. New issues such as the blogging activities, and extra scores to improve social interaction were also included.
Emerging themes during cycle two

Based on the analysis of data from the classroom observations, interviews, questionnaires and discussion forums, the following two major sets of themes about what modifications needed to be made to the hybrid learning environment in following cycles in order to enhance the quality of EFL learning emerged during cycle two:

(1) Themes about the use of technology

(2) Themes about the need for more scaffolding to improve knowledge construction

Themes about the use of technology

Two different sub-themes about the use of technology emerged from the analysis of data during cycle two: (a) characteristics needed for Learning Management Software (LMS) and (b) computer literacy.

Characteristics needed for Learning Management Software (LMS)

The limitations of TappedIn ® and the students’ constant complaints on the slow (WiFi) Internet connections during this cycle forced the researcher to reflect on the characteristics needed in a Learning Management System in order to facilitate the social construction of knowledge about effective writing in English by Indonesian students. To address the problems based on (WiFi) Internet connections, the researcher came to the conclusion that the LMS should be located on campus. With a local server, the (WiFi) Internet connections and the data transfer speed will be improved to facilitate the efficiency and effectiveness of this hybrid learning environment. In addition to this, the LMS should have the following features:
• The LMS used to facilitate online learning needs to have user-friendly navigation systems;

• The LMS needs to be able to facilitate social learning via the forms of chat sessions and discussion forums, which can be archived online;

• The LMS should have various objective and semi-subjective online test-making facilities that provide instant and accurate online assessment feedback—all of which need to be assessed automatically, instantly and accurately online; and

• Most importantly, the LMS must provide security so that the students feel secure in their learning interactions.

**Computer literacy**

In relation to the application of MOODLE ® in the next cycle, the students need to empower themselves with their computer skills even more. This computer literacy needs to be explored and developed more progressively as the needs to use the computers more effectively will increase. The students should be encouraged to join in the training sessions on how to interact with one another with MOODLE ® as a new platform for their learning experiences.

**Themes about the need for more scaffolding to improve knowledge construction**

Four different sub-themes about the need for more scaffolding to improve knowledge construction emerged from the analysis of data during cycle two: (a) more scaffolded online activities to enhance social interaction, (b) scaffolding-to-scaffold paradigm, and (c) assessment on the success of scaffolding.
More scaffolded online activities to enhance social interaction

During cycle two, it was found that more scaffolded online activities were necessary to enhance reciprocal, self and post-instructional scaffolding so that the students could become more actively engaged in their learning community. These scaffolds may cover such activities as:

- More online self-access materials (i.e., related to grammar and how to write well),
- More reflective opportunities to know what new knowledge they have acquired, and
- More discussion activities to stimulate high-order and analytical thinking skills.

In spite of the scaffolded activities, an online commitment form may also be required, with each student’s learning goals overtly stated so that the students will become more serious in setting their respective future academic achievements. In this way, it is hoped that the students will be more proactively interactive in their learning because they can easily compare what they initially expected at the beginning of the program with the real academic achievements which the students will attain at the end of the program.

Scaffolding-to-scaffold paradigm

The opportunities for the lecturer/researcher to scaffold the student facilitators so that they can scaffold their friends should be increased in future cycles. In this way, the students will be encouraged to work together as community members to actively construct their knowledge by applying the scaffolding actions they have experienced and
learned beforehand. The processes of scaffolding-to-scaffold can be achieved in the following four ways:

- More chat sessions moderated by students in medium-size groups (7-15),
- More blogging activities initiated by the students themselves to facilitate more learning,
- More peer-reviewing with an easy-to-do grading scale needs to be provided, and
- More researchers’ executive summaries provided online for future references.

Assessment on the success of scaffolding

A new technique of assessing the students, geared to their successful online learning using scaffolding needs to be devised for both group assessment and individual assessment so that a more valid and reliable tool to measure students’ performances through the use of scaffolding can be established.

Summaries of the changes implemented after cycle one

The following section presents the changes implemented after cycle one in the following areas: curriculum, data-collecting instruments, F2F mode, online activities and order of instruction.

Changes in the curriculum

After a personal communication concerning the writing courses offered at UPH with the writing coordinator and the previous writing teacher, a change of the writing curriculum was identified in the ‘Introduction to Writing’ course, which was offered
Chapter Four: Observations and reflections on the two cycles

during semester I (2006-2007): August–December 2006. At that time, the writing teachers focused on ‘sentence writing’ instead of ‘single-paragraph writing’ whereas the original ‘Effective Writing’ course (as a continuation of a ‘single-paragraph writing’ course) had been devised to teach ‘five-paragraph writing’. In the original ‘Effective Writing’ course outline, the students would be introduced to nine different styles of five-paragraph essays (i.e., examples, process, cause and effect, comparison and contrast, definition, division and classification, description, narration, and argumentation and persuasion).

Since there was a change in the writing curriculum, this would significantly affect the contents of the ‘Effective Writing’ course. Besides, the students also experienced some difficulties in following the course due to the jump from ‘sentence writing’ to ‘five-paragraph writing’. As a result, there was a need to adjust the course outline in week six. In order to cater for the changes, after week six, fewer topics were then offered and spread throughout the semester. The final decision at that time was that the ‘five-paragraph’ essays would still be introduced but only four types of essays would be covered and discussed. Thus, within one semester, the students were only expected to write four types of essays only, namely: ‘examples’, ‘process’, ‘comparison and contrast’ and ‘cause and effect’.

With the adjusted course outline in week six, the time needed to finish one topic of instruction in the following weeks was extended to two hundred minutes, instead of the one hundred minutes proposed in the confirmation document. That also meant that the students would deal with the next writing topics (i.e., the process essays, the comparison and contrast essays, and the cause and effect essays) for two consecutive weeks because
each session was conducted for one hundred minutes; instead of one week as also proposed earlier in the confirmation document.

With fewer types of essays to be learned and mastered, the students could focus more on the form, content and organisation of ideas of each essay type. They could also be more exposed to other writing activities like making a thesis statement with its topic sentences, providing relevant support and making a conclusion within a ‘five-paragraph’ essay. Apart from that, the extended time allotment of two-hundred minutes enabled the students to interact with one another in digesting and learning these essay types in more detail. Table 4.1 provides the summary of the changes made in cycle two, based on the reflections presented in the previous section.

Table 4.1
Changes in the Curriculum

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>During Cycle One</th>
<th>After Cycle One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course outline</td>
<td>Covering a lot more topics (because it was assumed in the ‘Introduction to Writing’ class, the students dealt with ‘single-paragraph’ writing. Instead, they dealt with ‘sentence writing’.)</td>
<td>Covering fewer topics (only 4 types of essays) with the hope that the remaining topics will be covered in the next writing course, i.e., the ‘Essay Writing’ course</td>
</tr>
<tr>
<td></td>
<td>One cycle being done within 230 minutes, consisting of the F2F mode in two weeks and one chat session done in the first week of the cycle</td>
<td>One cycle being done within 260 minutes, consisting of the F2F mode in two weeks and two chat sessions done in the first two consecutive weeks of the cycle</td>
</tr>
</tbody>
</table>

Changes in the data-collecting instruments

The data-collecting instruments were also changed in cycle two in order to accommodate the themes arising in cycle one. In the in-depth interview, more focus was
given to how the students could understand the concepts of scaffolding. The questionnaire was also amended to include more open-ended questions to give more freedom for the students to express themselves concerning their F2F and online activities. Table 4.2 provides the summary of the changes in the data-collecting instruments.

Table 4.2
Changes in the Data-collecting Instruments

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>During Cycle One</th>
<th>After Cycle One</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-depth interview guidelines</td>
<td>Focusing on scaffolding and other activities which might reflect the types of scaffolding</td>
<td>Focusing on scaffolding only and how to apply it in the ‘Effective Writing’ classes and somewhere else</td>
</tr>
<tr>
<td>Questionnaire</td>
<td>Providing answers based on the Likert scale</td>
<td>Providing open-ended answers to explore more</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>Adding new questions on blogs and extra scores</td>
</tr>
</tbody>
</table>

Changes in the F2F mode

In cycle two, a variety of teaching techniques was introduced. More handouts were given as in the first interview and the questionnaire, the students stated that they felt insecure with the online materials. They preferred to have their handouts distributed to them in the classroom. The students were also encouraged to engage in social learning and apply the scaffolding processes more often to enhance their learning. The groups were also restructured to provide an authentic teaching-learning atmosphere, where there were heterogeneous members of the groups, representing a real-life situation. Table 4.3 provides the summary of the changes in the F2F mode.
Table 4.3

Changes in the F2F Mode

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>During Cycle One</th>
<th>After Cycle One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching techniques</td>
<td>PowerPoint ® slides and handouts</td>
<td>PowerPoint ® slides and more handouts</td>
</tr>
<tr>
<td>Interactions among lecturer</td>
<td>More interactions among students to</td>
<td>More interactions among students to provide reciprocal scaffolding</td>
</tr>
<tr>
<td>and students</td>
<td>provide reciprocal scaffolding</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>Watching a movie</td>
<td></td>
</tr>
<tr>
<td>Expecting students to access</td>
<td>Encouraging more students to access</td>
<td>Encouraging more students to access online materials for self-scaffolding</td>
</tr>
<tr>
<td>online materials</td>
<td>online materials for self-scaffolding</td>
<td></td>
</tr>
<tr>
<td>Group management</td>
<td>Restructured into heterogeneous groups</td>
<td>Restructured into heterogeneous groups to provide a real-life situation</td>
</tr>
<tr>
<td>Department’s policy: Group</td>
<td>Restructured into heterogeneous groups</td>
<td>Restructured into heterogeneous groups to provide a real-life situation</td>
</tr>
<tr>
<td>A (less able students) and</td>
<td>Restructured into heterogeneous groups</td>
<td>Restructured into heterogeneous groups to provide a real-life situation</td>
</tr>
<tr>
<td>Group B (more able students)</td>
<td>Restructured into heterogeneous groups</td>
<td>Restructured into heterogeneous groups to provide a real-life situation</td>
</tr>
<tr>
<td>No particular patterns in the</td>
<td>Eight smaller groups with a facilitator</td>
<td>Eight smaller groups with a facilitator each to provide the students to apply</td>
</tr>
<tr>
<td>groups</td>
<td>each to provide the students to apply</td>
<td>reciprocal and post-instructional scaffolding</td>
</tr>
<tr>
<td></td>
<td>reciprocal and post-instructional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>scaffolding</td>
<td></td>
</tr>
</tbody>
</table>

Changes in the online activities

Both in the chat sessions and discussion forums, the researcher provided more freedom to the students in cycle two. The students were always encouraged to apply the scaffolding processes, particularly the post-instructional one. The topics also moved from common topics related to their writing skills and contents to topics related to this research. With the blogs, the students’ freedom was unlimited because other students and the researcher could give any comments to provide reciprocal and post-instructional scaffolding to construct knowledge together as a learning community. Table 4.4 provides the summary of the changes in the online activities.
### Table 4.4

*Changes in the Online Activities*

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>During Cycle One</th>
<th>After Cycle One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chat sessions</td>
<td>Lecturer-controlled to provide expert scaffolding</td>
<td>Less and less lecturer-controlled. The last one being moderated by the students themselves to provide them with the application of reciprocal and post-instructional scaffolding</td>
</tr>
<tr>
<td>Discussion forums</td>
<td>One big group</td>
<td>Eight smaller groups with a facilitator each to provide the students to apply reciprocal and post-instructional scaffolding (the same as the F2F groups)</td>
</tr>
<tr>
<td>Topics</td>
<td>Mostly on writing topics (theoretical and practical)</td>
<td>On writing topics and other interesting and controversial topics and sometimes on research topics as well to provide a variety of questions for discussions</td>
</tr>
<tr>
<td>Blogs</td>
<td>N/A</td>
<td>Twelve students creating their blogs and posting what they did but only eight of them sharing their blogs with the learning community</td>
</tr>
</tbody>
</table>

### Changes in the order of instruction

In cycle two, there was a change in the order of instruction as seen in Table 4.5. This time it started with the online mode followed by an extra activity to watch a movie. Then, the real cycle began with the online mode followed by the F2F mode. The changes in the order of instruction provided a variety of teaching techniques and based on the observation, the F2F could either be presented first or later. It did not make any significant difference. Rather, the next activities, whether F2F or online, provided more reinforcement on the part of the students to practise what they had learned earlier. In that way, the students were likely to extend their knowledge. Table 4.5 provides the summary of the changes in the order of instruction.
Table 4.5

*Changes in the Order of Instruction*

<table>
<thead>
<tr>
<th>Descriptions</th>
<th>During Cycle One</th>
<th>After Cycle One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order of instruction</td>
<td>F2F -&gt; online</td>
<td>Online -&gt; watching a movie -&gt; online -&gt; F2F</td>
</tr>
</tbody>
</table>

**Chapter summary**

The sequence of scaffolding was provided and closely implemented to facilitate learning. Initially, the students were not familiar with this but as the research progressed, they became more accustomed to this new learning style. Many of them began to realise the importance of applying scaffolding in their learning activities.

The two cycles contributed significantly to this research design because in cycle two, changes were made to provide more engaging activities so that the students could express themselves better and more fully in their learning journeys. There were five areas which experienced changes, namely the curriculum, the data collecting instrument, the F2F mode, the online activities and the order of instruction. All were established to provide better learning experiences in cycle two.

The three major sets of themes about how to optimise the functioning of the hybrid learning environment during cycle one were implemented in cycle two. It was argued that more attention was given to some emerging themes, such as providing ‘new’ technical and search skills for the students to navigate the online activities more effectively, putting them in smaller groups so that they could apply the reciprocal and post-instructional scaffolding, and encouraging the students to create their blogs to provide more opportunities for the students to practise their writing skills on their own and providing scaffolding to one another at the same time.
The two major sets of themes about what to accomplish in the hybrid learning environment in the third cycle which emerged during cycle two were documented. These themes may be developed in future research. It was proposed that some important themes cover areas such as using a new LMS for more conducive online interactions, providing more computer literacy, dealing more with the scaffolding-to-scaffold paradigm, providing more opportunities for the students to scaffold their peers, and assessing the students in the scaffolding processes so that the scaffolding processes can be specifically assessed. In the following chapter, the findings of this research study will be presented.
CHAPTER FIVE: FINDINGS

In this chapter, the findings from the study are presented in five sections: the revised theory of scaffolding, progress from scaffoldee to scaffolder, evidence of scaffolding actions, knowledge construction through scaffolding, and social interactions in a vibrant learning community. The chapter concludes with a brief summary and discussion of the findings.

Revised theory of scaffolding

The following perspectives of scaffolding have been modified and extended from Holton and Clarke (2006), who proposed the original concepts of expert, reciprocal and self-scaffolding. These three types of scaffolding were briefly presented in the literature review. The quasi-transcendental and transcendental scaffolding concepts were not included in the original concepts because they are the extensions of the scaffolding theory derived from the outcomes of this study and will be elaborated later in this section.

Based on the observations in the classroom and the analysis of online data, the scaffolding definitions have been extended and classified into two additional scaffolding aspects, namely: productive and receptive. Being productive means that the student actively provides a type of scaffolding, or (quasi)-transcendental scaffolding, to her/himself or someone else in the learning community. In this productive process, the student, functioning as a scaffolder, is actively sharing her/his previously constructed knowledge with someone else. Being receptive means that the student only received a type of scaffolding from her/his friend(s) in their interactions to construct knowledge together. In other words, the student, functioning as a scaffoldee, only passively receives
the information provided by her/his friend(s) in a particular discussion, for example. It is in this receptive part of scaffolding that the original names of scaffolding are still retained.

Based on the receptive and productive dichotomy, the extended types of scaffolding can be summarised in Table 5.1.

Table 5.1
Comparisons of Types of Scaffolding

<table>
<thead>
<tr>
<th>Holton and Clarke’s (2006) types of scaffolding</th>
<th>Extended types of scaffolding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>Transcendental</td>
</tr>
<tr>
<td>Non-existent</td>
<td>Expert, reciprocal and self</td>
</tr>
<tr>
<td>Reciprocal</td>
<td>(Quasi)-transcendental</td>
</tr>
<tr>
<td>Self</td>
<td>(Quasi)-transcendental</td>
</tr>
</tbody>
</table>

In these scaffolding processes, two different terms need to be clarified and defined. They are information and knowledge. Information consists of organised facts, low-level skills, simple rules and procedures; while knowledge comprises concepts, high-level skills, tactics and algorithms (Horton, 2008). According to Nelson (2008), “information is delivered like a package to a doorstep” and knowledge is “the result of receiving information, actively working with it, and personally transforming it so that it makes sense and is useful” (pp.79-80). In other words, information consists of discrete data and knowledge is data arranged in networks with meaningful connections between the nodes (Salomon, 2002). If the two different terms are related to scaffolding, the productive part of scaffolding produces knowledge; the receptive part receives knowledge and generates information. These will be discussed in greater detail in the following sections.
Expert scaffolding

Expert scaffolding, which represents the basic level of scaffolding, takes place when a more capable person is helping a less capable person by providing some kind of awareness for future knowledge construction. In a classroom setting, the more capable person can be the lecturer and the less capable person is the student. In transferring knowledge, the more capable person is actively constructing knowledge, providing a transcendental type of scaffolding because the lecturer has experienced the three types of scaffolding and is now ready to scaffold other people. The one receiving the information receives an expert type of scaffolding. The expert scaffolding can then be visualised in Figure 5.1 as follows:

**(Lecturer as a scaffolder):**

transferring *transcendental* scaffolding

**(Students as scaffodees):**

receiving *expert* scaffolding

**Notes:**
- Conventional, passively receiving knowledge & providing information
- Transcendental, actively providing knowledge

*Figure 5.1 Expert scaffolding*
Reciprocal scaffolding

Reciprocal scaffolding occurs when a student is working with another student in constructing their knowledge. They are collaborating in the transaction of knowledge to come to a certain agreement as to what is best to formulate their knowledge in a learning community. The one who is actively transmitting the knowledge is providing (quasi) transcendental scaffolding for the first time and the one passively receiving the information is receiving reciprocal scaffolding. The student has the opportunity to practise constructing knowledge for the first time with her/his peer(s). The reciprocal scaffolding can be visualised in Figure 5.2 as follows:

![Figure 5.2 Reciprocal scaffolding]

Self-scaffolding

Self-scaffolding takes place when a student is actively constructing knowledge within her/himself. It is a process where a student is comparing the information and then adjusts her/his current knowledge. The process of giving and receiving the information takes place within oneself. If the student is actively constructing knowledge, (quasi)
transcendental scaffolding is taking place for the second time. If the student is only receiving the information within her/himself, self-scaffolding is occurring. Self-scaffolding is important because it contributes to the development of knowledge within oneself. Bickhard (2007) emphasises “that the development of self-scaffolding skills—for example, learning to break problems down into sub-problems, moving to simpler and ideal cases, making use of resources currently available that may not in general be available, and so on—constitutes a major field of development in its own right.” (pp. 84-85) He further states that “the scaffolding of the development of self-scaffolding skills should be at the heart of educational design and practice” (p. 85).

In this self-scaffolding concept, the student has the opportunity to get into a deeper construction of her/his knowledge one more time. This time the process of constructing the knowledge is happening within oneself, which can happen without any limits. In reality, the students may find other resources on her/his own and adjust the knowledge s/he has acquired. In such a situation, the student may shift her/his paradigm. The change may take place, for example, when s/he designs more and more complex essays in the course of the development from the first draft to the final draft. The addition and deletion of ideas, the complexity of the sentences used, all reflect the meta-cognitive skills.

Apart from that, s/he may also change her/his perceptions through reflective thinking. Self-scaffolding is effective when the student is highly motivated. Caladine (2008) stresses that “effectiveness and efficiency of learning are strongly linked to student motivation” (p. 205). Thus, without being asked, the student keeps on constructing her/his knowledge. Self-scaffolding can be illustrated in Figure 5.3 as follows:
Transcendental scaffolding in this study is defined as an active process of scaffolding which is provided by a student (or someone else in a general context) to a peer or a group of students after the student has experienced the three types of scaffolding (expert, reciprocal and self) imposed on her/him in the teaching-learning environment to understand a certain capsulised concept. This transcendental scaffolding is basically the continuation of the expert-reciprocal-self sequence of scaffolding. With the self-scaffolding, the student can scaffold her/himself to construct knowledge internally. Miller (2005) mentions that “self-scaffolding may show exactly what children have to do to make internalization happen” (p. 210). If the student can scaffold her/himself internally, s/he may also be able to externalise the acquired knowledge within her/himself by scaffolding her/his other friends or, if necessary, the lecturer as well in order to extend her/his scaffolding capabilities. That is, in fact, the foundation of the transcendental scaffolding. As the name itself suggests, transcendental scaffolding refers to a process ‘beyond’ scaffolding. To be literally specific, this implies an active scaffolding process done by the actor/doer/giver of the scaffolding.
The transcendental scaffolding processes are happening in an inside-out process, reaching out from within oneself to the outer world, embracing more people in knowledge construction. In the first stage, the students may scaffold themselves actively by constructing their knowledge within themselves. Then, they begin to be able to reach out and scaffold their peer and, in the end, they can extend their transcendental scaffolding skills to scaffold other peers in the form of a presentation to a class, for example.

Thus, transcendental scaffolding, which constitutes the ultimate level of scaffolding within this constrain of the present study, refers to a terminal situation where a student has undergone all of the previous three types of scaffolding, expert, reciprocal and self, thus encompassing all the three. At this stage, the student has become a scaffolder who is ready to scaffold himself or herself or her/his other friends. The student has reached her/his peak in constructing the knowledge. It is during this stage that the scaffolding is completely removed because the student has sufficiently saturated her/himself in the subject matter for quite a while and has become an independent learner. In other words, the student’s storage of the knowledge should be sufficient by now and s/he is able to use the knowledge to help her/himself or other people. At this time, the previous experiences with the three types of scaffolding have made her/him aware that s/he needs to extend the capability to a more challenging task so that s/he is reinforcing the knowledge along the way.

The transcendental scaffolding can occur in a one-to-self, one-to-one, or one-to-many interaction. The one-to-self transcendental scaffolding can be illustrated in Figure 5.4 as follows:
(STUDENT both as a scaffoldee-scaffolder):

both actively scaffolding, transferring **transcendental** scaffolding

within oneself

**Notes:**

(quasi) transcendental, actively providing knowledge

---

**Figure 5.4** Transcendental scaffolding 1 (one-to-self interaction)

In the process of one-to-self transcendental scaffolding, the student is actively scaffolding her/himself, providing knowledge for internalisation within oneself. The slight difference between this type of scaffolding and the self-scaffolding is that in the latter, sometimes the student is providing information (receptively); not knowledge within her/himself. However, at other times, the student may also provide knowledge (productively), as illustrated in Figure 5.3, which describes the self-scaffolding.

In the process of one-to-one transcendental scaffolding, the student is transferring transcendental scaffolding to her/his peer. The student is sharing her/his knowledge with someone else in the learning community by actively constructing her/his knowledge. The peer being scaffolded only passively receives the knowledge and may occasionally provide knowledge, as illustrated in Figure 5.5.
In the process of one-to-many transcendental scaffolding, the student is scaffolding more than one peer. Possibly, the student is sharing her/his knowledge with a group of people, including the lecturer. In other words, the student is externalising her/his knowledge to many people in the learning community, as illustrated in Figure 5.6.
Quasi-transcendental scaffolding

Quasi-transcendental, which can be defined as a transitional stage before the students can provide transcendental scaffolding, describes a situation where a student requires further scaffolding from a more capable peer or lecturer because the student is still not confident enough to provide the scaffolding to their peers. As a result, the student asks for some confirmation or further assistance. However, if the scaffolding provided is confirmed positively by more knowledgeable others, it switches to transcendental scaffolding.

Progress from scaffoldee to scaffolder

As the metaphorical name of scaffolding suggests in the construction of buildings, the progress from scaffoldee to scaffolder is ideally depicted in a bottom-up approach since the foundation of the earlier scaffolding is necessary so that the other types of scaffolding can be placed securely on top of each respective one (see Table 5.2). It is expected that the students will experience transformations from scaffoldee to scaffolder at some point in their learning journeys. They will move up the ladder from scaffoldees to scaffolders and their roles, being scaffoldees or scaffolders, may change along the way depending on the different tasks they encounter in their learning activities.

It is also important to know that once the scaffoldees can learn on their own, the scaffolding process is removed because they have experienced the process of learning a certain skill from beginning to end. In spite of the removal of scaffolding, the process of independent learning continues on and is inherent for the whole of one’s lifetime.

As illustrated in Table 5.2, the basic level of scaffolding is expert scaffolding. Expert scaffolding is important because it is the basic foundation upon which higher
types of scaffolding are built. As a result, it is necessary for the lecturer to provide solid expert scaffolding as a learning foundation before expecting the students to proceed onto other types of scaffolding. As a scaffoldee, a student just functions as a recipient of scaffolding.

Table 5.2
Scaffoldee-scaffolder Transformation

<table>
<thead>
<tr>
<th>Type</th>
<th>Productive [giving]</th>
<th>Receptive [receiving]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcendental scaffolding</td>
<td><strong>Scaffolder</strong> [in projection - metacognition] [Student]</td>
<td><strong>Scaffoldee</strong> [in learning new things: expert scaffolding is taking place for her/him] [Student]</td>
</tr>
<tr>
<td>Quasi-transcendental scaffolding</td>
<td>a transition to transcendental scaffolding</td>
<td></td>
</tr>
<tr>
<td>Self-scaffolding</td>
<td><strong>Scaffoldee/Scaffolder</strong> [in reflection–metacognition]–happening within oneself [Student]</td>
<td></td>
</tr>
<tr>
<td>Reciprocal scaffolding</td>
<td><strong>Scaffolder</strong> [in providing peer feedback–metacognition] [Student]</td>
<td><strong>Scaffoldee</strong> [in receiving peer feedback] [Student]</td>
</tr>
<tr>
<td>Expert scaffolding</td>
<td><strong>Scaffolder</strong> [Lecturer]</td>
<td><strong>Scaffoldee</strong> [Student]</td>
</tr>
</tbody>
</table>

After expert scaffolding, the next type of scaffolding to emerge is reciprocal scaffolding. In this type of scaffolding, the students have a chance to consolidate the knowledge they have acquired in their discussions with their peers. As a scaffolder, a student may provide peer feedback, which involves some metacognitive processes. As a scaffoldee, a student may just receive the information provided by her/his peer.

After reciprocal scaffolding, self-scaffolding may emerge. With this scaffolding, the students are put into the reinforcement phase after undergoing the consolidation process in the reciprocal scaffolding. Furthermore, what is occurring in self-scaffolding needs a deeper investigation and the emphasis of doing the scaffolding within oneself is unique and specific to Holton and Clarke’ (2006) theory of scaffolding. Furthermore,
self-scaffolding or process of internalisation is effective when the students are highly motivated (Caladine, 2008; Clarke, 2008; Davies, 2006). Without being asked, the students keep on constructing their knowledge within themselves, internalising the knowledge they have acquired beforehand. It is this type of scaffolding which has inspired the researcher to expand Holton and Clarke’s (2006) theory of scaffolding. The researcher argues that if the students can scaffold themselves, they may be able and ready to scaffold someone else in their immediate environment. Actively scaffolding someone else can be derived from Piaget’s conception of knowledge building, which is described as ‘inside-out’, where cognitive processes are initially constructed internally and that this knowledge construction consequently has impacts which later influence someone’s relationships with the environments (Kaye, 1984; Marti, 1996). On the other hand, the three types of scaffolding (expert, reciprocal and self) discussed earlier may be classified as ‘outside-in’, following Vygotsky’s conception of knowledge building, where knowledge is constructed from the environments and then internalised as cognitive processes (Kaye, 1984; Marti, 1996). The combination of the two concepts—internalisation and externalisation—when synergised, should empower the students and enrich the teaching-learning activities (Borthick, Jones, and Wakai, 2003).

Eventually, transcendental scaffolding may emerge. This type of scaffolding encompasses all of the three previous types of scaffolding. Transcendental scaffolding can be compared to a situation when the students have reached academic enlightenment in the teaching-learning processes. In this situation, the students who used to receive knowledge from their lecturer/peers are now ready to externalise the knowledge they have acquired in order to scaffold other people in the learning community. This kind of scaffolding is seldom referred to in the literature because it was recently identified in this study as an extension of the scaffolding theories.
However, just before the students arrive at the competency of providing transcendent scaffolding, they may engage in some types of quasi-transcendent scaffolding actions. This is a transitional situation before the scaffolding is completely removed. It refers to a phase where they are not yet ready to construct their knowledge independently. In this situation, the students may know the answers of a certain problem but they are still uncertain whether the information given is valid or not and they may ask for the lecturer to confirm their answers. This is in line with what Celce-Murcia (2001) has termed as “inert knowledge”. This is a situation where the students are not yet ready to apply their newly-acquired knowledge in their real world.

**Evidence of scaffolding actions**

Holton and Clarke (2006) identified and defined three types of scaffolding: expert, reciprocal, and self. However, as stated earlier, during the analysis of data from the online discourse, in addition to Holton and Clarke’s three types of scaffolding, two different types of scaffolding were identified. These two new types of scaffolding were designated as quasi-transcendental and transcendent scaffolding. Thus, altogether five types of scaffolding were identified during the course of this study: expert, reciprocal, self, quasi-transcendental, and transcendent.

This is exemplified in the following transcript taken from the online discussion forum. At that particular time, the students were discussing the definition of a paragraph. The types of scaffolding utilised in this discussion forum are labelled: [ES] = Expert Scaffolding; [RS] = Reciprocal Scaffolding; [SS] = Self-Scaffolding; [TS] = Transcendental Scaffolding and [QTS] = Quasi-Transcendental Scaffolding.
Lecturer A’s stimulus: giving expert scaffolding by providing a stimulus or an awareness for discussions.

“How would you define a paragraph?” [ES]

Student A’s response: trying to communicate his early stage of knowledge construction.

“I would define a paragraph as a section of writing, usually consisting of several sentences dealing with a single idea.”

Lecturer A’s intervention: providing expert scaffolding to challenge the student.

“Good. How can we improve this definition? Do you think something else can be added?” [ES]

Student A’s response: trying to connect to an expert type of scaffolding received earlier. At this time, he is providing reciprocal and transcendental scaffolding.

“Well, lecturer B told me that ‘A PIECE OF WRITING’ should be added in the definition. So, the definition becomes ‘A section of A PIECE OF WRITING, usually consisting of several sentences dealing with a single idea.’” [RS]-[TS]

Lecturer B’s intervention: providing expert scaffolding to stimulate further knowledge construction.

“A good definition! Can you think of how to organise those sentences so that they focus on single idea?” [ES]

Student B’s response: trying to construct more knowledge, based on lecturer B’s intervention and at the same time this is reciprocal and transcendental scaffolding for other students in the learning community.

“By developing just the main idea. Don’t try to write things that are not connected to the idea of the paragraph.” [RS]-[TS]

Student C’s response: trying to construct knowledge, based on lecturer B’s intervention. Another type of reciprocal scaffolding is introduced. Quasi-transcendental is also identified because the student concerned was not really sure.

“Maybe try to decide first, which form of paragraph we will use, is it deductive or inductive or descriptive then we write the main
sentence first then elaborate it. Basically, write the structure/outline first. It's just a guess, though...” [RS]-[QTS]

Student A’s response: trying to apply what has been discussed by linking it to a real example, reciprocal scaffolding and transcendental scaffolding.

“Maybe, we should make a border, so in that paragraph there is only one thing discussed. For instance, if the topic about parts of car, and in the third paragraph, we are talking about a wheel, DON'T ever talk about a headlamp in that paragraph.” [RS]-[QTS]

Student D’s response: trying to have self-scaffolding.

“Sir...I've been wondering something all this long. There's a paragraph... which does not consist of a topic or conclusion. It is just kinda of chit-chat or support that's not clear. Can we call that a paragraph?” [SS]

Student B’s response: providing reciprocal as well as transcendental scaffolding to her peers.

“A paragraph consists of:

a topic sentence->explaining the main idea for the whole paragraph. It can be in the end of the paragraph, in the middle, but usually in the beginning of the paragraph itself.

supporting sentences->explaining the topic sentences, so they can make the paragraph more interesting.

a conclusion->concluding the contents of the whole paragraph.” [RS]-[TS]

This online discourse began with a stimulus provided by Lecturer A. Student A tried to provide a response. However, Lecturer A seemed not to be content with the answer and provided an intervention to stimulate further discussion. Student A tried to connect and add this information with the support of some expert scaffolding that he had received earlier. Lecturer B intervened and provided some kind of a challenge to go further. Then, Student B joined in, providing a reciprocal type of scaffolding by restating Lecturer B’s statement. On the part of Student A and the community members, the
information provided by Student B was a kind of reinforcement seeing the same concept from a different perspective. Later on Student C joined in, providing another type of reciprocal scaffolding. She was also providing quasi-transcendental scaffolding at the same time because she was not yet sure of what she was defining. She started with the word ‘maybe’, indicating a state of doubt, and concluded with the sentence “It is just a guess, though...”, meaning another state of doubt. Yet, she was confident enough to share her knowledge. On the part of Student A and others, this piece of information might have added to their repertoire of knowledge concerning the definition of a paragraph. It then became more interesting when Student A provided the next response by applying what he had understood beforehand. He even tried to connect his current understanding of a paragraph definition to the process of describing parts of a car, particularly the wheel. He further explained that while we are talking about the wheel, we are not allowed to talk about the headlamp.

For other students, this was a reminder of the same concept of paragraph writing, that is, to maintain unity. Sometime later, Student D came in with her own problem. She might have been following the discussions all this while and she began to ask herself what a paragraph was all about. In her search for knowledge, she provided another perspective of a definition of a paragraph. Then, Student B came with her transcendental scaffolding. After dealing with the current knowledge of a paragraph with the expert, reciprocal and self-scaffolding, she was actively providing the knowledge she had acquired. If we carefully compare her first posting with her last one, there has been a paradigm shift, concerning her understanding of a paragraph. Her explanation could be seen anytime, anywhere, by anyone online in that learning community. On the other students’ part, they were receiving some transcendental scaffolding from her because they were just passively receiving this online information.
Expert Scaffolding

Expert scaffolding takes place when a more capable person (such as the lecturer in this study) helps a less capable person (such as a student in this study) by providing some kind of awareness for future knowledge construction (Holton & Clarke, 2006). In this study, the expert (i.e., the lecturers) scaffolded the construction of knowledge about how to compose English text by engaging in the following ten types of actions: (1) providing information, (2) providing encouragement, (3) providing a suggestion, (4) providing a reflection, (5) providing a stimulus, (6) providing an awareness, (7) providing a remedy, (8) giving a challenge, (9) providing a reminder, and (10) providing a summary.

Providing information

At various times during the course of this study, the lecturer had to provide the students with information in order for the students to advance their knowledge about how to write essays in English. This is well exemplified by the following comment made to the students by the lecturer when they were engaged in the study of a particular genre of writing, example essays. Here the lecturer provides his students with information about transitions. Holton and Clarke (2006) refer to this as conceptual scaffolding (i.e., promotion of conceptual development).

“The transitions tell us that it is an example essay.”

During the course of the study, the lecturer not only scaffolded his students’ construction of knowledge by providing content information about syntax, grammar and genres but also with information about how they could meta-cognate about their learning to write in English. This is well exemplified by the following comment:
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“It is true that in learning something, our ability to memorise will contribute something to our knowledge construction.”

This type of scaffolding is akin to Holton and Clarke’s heuristic scaffolding (i.e., promotion of heuristics for learning.)

**Providing encouragement**

There were certain circumstances when the students felt discouraged in their search for knowledge. They had attempted to improve their writing skills in any way they could but they were not able to feel the progress they had been making. In such situations, the lecturer provided expert scaffolding to encourage them to persevere in their efforts, which can be illustrated as follows:

“Just keep writing, MP. You may not be able to see the progress you have been making so far. Other people like your friends or lecturers will notice the changes....:)”

“You are right. So, write something interesting or controversial for us. You need to be more creative and don't be afraid of expressing your most interesting/controversial ideas here!”

“It is really important for us to be optimistic. Nothing is wasted if we really try to improve ourselves. So, try everything as you can do it. Right?”

“Be confident of yourself. People make mistakes and learn something from those mistakes. That is the essence of education. Keep trying!”

“You are right, Anggie. Keep up the good work.”

**Providing a suggestion**

When the students seemed to encounter some difficulties in their studies, the lecturer provided some suggestions to help them solve or cope with the problems which they were facing. Sometimes, the students were directed to seek help from some other students in the learning community, as reflected in the following comments:
“Well, MP, why not start writing a blog? Ask Ani, Siska, Amy or Elis for some help. I believe they will help you.”

“That is a good thing to do, Teo. For those who face a similar problem, please talk to Teo about it.”

“You seem to have learned a lot of things. Try to practise more and hope that you will be more successful in your future writing classes as well.”

“Hera, you have to reflect on what new things you have learned here...:-) Anyway, I guess everyone is in the same boat so don't worry. Keep trying. Find as many sources as possible and don't just print them out. Instead, read them as often as you like and try to understand them.”

“Siska is right. Anyway, don't get too afraid of what you want to express. Just help people and people will help you.”

Providing a reflection

In this expert scaffolding, the lecturer provided a model of writing a reflection so that the students would know what to provide in writing a reflection. As a result, the lecturer made an attempt to reflect on what he had not known before and what he knew later about the differences between a thesis statement and a topic sentence, as illustrated in the following text:

“Another example from me...a simple one...:-) I have just realised that a thesis statement is different from a topic sentence in that a thesis statement is broader in its scope and that within a thesis statement, there are some ideas to be developed into topic sentences within the next paragraphs and in our case, in ‘Effective Writing’, we need to write 5-paragraph essays. Each paragraph consists of at least 7-15 sentences. How lovely!”

Providing a stimulus

At some points of their learning journeys, the interests of the students dropped and they began to slow down in their participations and interactions. When this happened, the lecturer provided a stimulus to stimulate further heated discussions. Alternatively,
such a stimulus was also given to take the students to a deeper level of understanding. This is well exemplified by the following comments:

“We, whose blog is the best, then, everyone?”

“Well, what do the others think first? Feel free to express your ideas.”

“I think causes come first and then effects come later. I have this pattern to illustrate the HIROSHIMA movie:

CAUSES (CD1) -> The ATOMIC BOMB was dropped <- EFFECTS (CD2)

If that is the case, you can focus on either one. Combining both will be too difficult to handle. What do you think?”

“You are right, CL. But who is going to take care of the kid(s)? That's why kids are now 'out of control'...:) If only women stayed at home, they could take care of their kid(s). How about that?”

Providing awareness

At times, the students reached a certain stage where they were unable to understand a certain concept. In this case, the lecturer intervened to provide awareness of the importance of doing something from a different perspective, hoping that the students would finally understand the concept. Some examples of this expert scaffolding are as follows:

“AW, it is always difficult to start something new. Do you agree? When you can assess your friends accurately, you have reached a higher stage of learning. Do you agree?”

“Well, CA, in a C&C essay, you can either compare or contrast something or someone...:) However, the main purpose of writing the essay is more important than anything else. The decision is all yours.”

“Good. But, make sure you don't forget what you have read...:-) You can also improve yourself by helping friends.”

“Have you ever tried to help your friend(s)? By 'teaching' your friends, we can learn something.”
Providing a remedy

Whenever the students seemed to be off the course, wandering in different directions—which did not happen frequently—the lecturer would bring them back on track by providing a remedy. When necessary, more explanations were given to guide the students to correctly understand a particular concept, as described below:

“Please allow me to correct this use of the idiom. It should be ‘courting death’. The word ‘courting’ used to mean something similar to ‘dating’, but idioms cannot be altered. In fact, sometimes I try to do that with native speakers just to be funny and creative, and I usually end up confusing them. It only works sometimes, and usually only with my closest friends who are used to my zany sense of humour.”

“AF, you need to change your perspectives towards learning...:-) Learning doesn't always take place in the classroom and it is not always led/guided by a teacher. Your friends can become sources of information as well.”

Giving a challenge

To encourage the students to reach a higher degree of analytical thinking, the lecturer sometimes facilitated a challenge so that the students were exposed to seeing the same concepts from different perspectives to enrich their understanding. Positive feedback was given first and it was then followed by the challenge, as shown in the following comments:

“Thanks, everyone, for your answers. Who is next? Do you think you will change your minds after reading your friends' comments? Thank you.”

“Good. How can we improve this definition? Do you think something else can be added?”

“You got a point there, Amy. Association is very important in constructing a paragraph. But can you please explain more about HOW the sentences of a paragraph 'associate' with each other? :)
"
Providing a reminder

There were also various occasions where the students did not perform well or failed to meet the expectations. In such situations, the students were then reminded, among other things, of some important concepts, the required behaviour or of doing the right things so that a conducive learning community could be sustained, as illustrated below:

“Yes, of course. Hope that everyone sticks to the online guidelines and write more thoughtful comments as necessary. Anything can happen in a chat session, though. What is more important is to read the TappedIn® transcript sent to you about five minutes after you have logged out. How about that? Next time, I will ask some students to help me moderate the chat sessions. Are you willing to help us? Thanks.”

“And...don't forget to apply what you have learned. That is more important than just memorising every single concept.”

“By helping other people, you are learning something. That is a kind of reinforcement within your knowledge construction, particularly in this ‘Effective Writing’ course.”

“Besides, the Internet also provides us with the FLOODS of INFORMATION...:-) Good luck with your search for more knowledge; NOT information...:-) This style of learning is more meaningful. Yet, if you still have a problem, come and see me in my office. This will also apply to everyone taking the ‘Effective Writing’ course.”

“Well..about scaffolding....it is very important. There are four types, namely: EXPERT, RECIPROCAL, SELF AND TRANSCENDENTAL. Download the file about scaffolding in the scaffolding folder if you want to know more. Everything is provided online, just explore them.....:-)”

Providing a summary

After a particular discussion, a summary was given to end a discussion by providing the gist of what the students had been exploring or grappling with. This also facilitated opportunities for some reinforcement of what the students had learned before
or, alternatively, this type of expert scaffolding provided information they had missed earlier, reflected by the following comments:

“Thanks a lot, everyone for providing the sites. Read them and they will give you tons of information. It is up to you to turn that information into knowledge. Good luck!”

“I don't agree with this. Actually, it depends on whether the noun is a countable/uncountable one. With a countable noun, of course, we need an article (a/an/the) or 'something else' (determiners) ....:-) On the other hand, with an uncountable noun, we cannot put 'a/an' although there are exceptions. However, we can use 'the'/other determiners. Right? I guess you need to explore more....)”

“Thanks for providing us with the history of REFLECTION...:-) The most important thing is - you are right - that we need to put these theories into practice.

The simplest idea of REFLECTION is that you are comparing what you know NOW with what you didn't know THEN.”

**Reciprocal scaffolding**

Reciprocal scaffolding occurs when a student works collaboratively with another student to construct knowledge (Holton & Clarke, 2006). In contrast to expert scaffolding where information is primarily transmitted one-way from expert to novice, in reciprocal scaffolding, there is a two-way discourse between the actors engaging in the discourse. In this study, the students reciprocally scaffolded their construction of knowledge by engaging in the following six types of actions: (1) providing information, (2) providing encouragement, (3) providing a suggestion, (4) providing a reflection (5) providing confirmation, and (6) giving an explanation.

**Providing information**

In these instances, the students provided information to share what they had known previously. Different kinds of information could be presented in their
discussions. By sharing their knowledge, they had ample chances to internalise and externalise what they had learned before.

“Yours are very helpful, Amy...I've just checked the second one on your list and it's very complete...Thanks!”

“What I know, it's usually in the last sentence of the introductory paragraph.”

“Any 'How to’ is a process.”

“Hi, all. I have found some website(s) that contain useful information about the introductory paragraph. If you have time, you could open them, maybe you will understand more about introductory paragraph.. Thanks.

“Hey, guys!!

I just want to tell you that I'll try my best to correct your writing if there's a mistake in it. However, you guys are free also to comment on my writing. That's what friends are for, right!? So, we need to help and courage [sic] one to another. Remember that! Thank you. See you!!”

Providing encouragement

In their online discussions, some students appeared to feel discouraged because they had failed to do something, for example. As their peers, the other students provided encouragement to one another. This kind of scaffolding was important in that the encouragement came from the students themselves, which can be illustrated in the following comments:

“It's OK personally for me, Nani...for me, there's a phrase, treat others as you want to be treated...so don't view your acts of correcting as an ATTACK for others and then later you will attacked back (sorry I'm being hyperbolic here ;p) but as a HELP for others...help them then you'll be helped too (of course in this process you have to be open to criticism too otherwise you won't develop your writing techniques)...Hope it helps...(sorry if I don't get your point right...)

“Keep up the learning spirit alive! ;)”
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C'mon, Petty... You can do it. Don't give up.

“I agree with you friends... each subject has different difficulties... but, we have to read and exercise more to improve it.. NEVER GIVE UP and STUDY HARD are the keys... ;)”

“I completely and totally agree..... Never give up, no matter how hopeless. The show must go on. Keep on movin’.”

Providing a suggestion

The many suggestions offered by the other students in the learning community may have been more easily digested by the students because their level of understanding was approximate. The idea of providing a suggestion may have helped the students find a way to do things better in a different way. In the following comments, the students attempted to provide suggestions to scaffold their friends who may have encountered their own problems.

“It's great to hear that you're improving your confidence in writing, Ani. I suggest you keep practising to sharpen your sensitivity in English grammar.

I believe one day you will write an amazing essay without even thinking about the grammar because you're already used to writing grammatically-correct sentences!”

“But I suggest to read articles because novels are too heavy if your target is just to encounter new vocab. This has happened to me. I read HP 6 that time. Whenever I encountered new vocab, I tried to find the meaning in the dictionary and because there were too many new words, I was exhausted and stopped reading that novel.”

“I've got some ideas actually, how about :

1. each time we encounter a difficult word we write it down in a piece of paper or a string of little paper (you can buy it in bookstore)

2. after finish reading a chapter, we write the easier substitute words for those hard words...

3. then reread the chapter or sentences again until you perfectly sure that you get all the meaning correctly.
P.S: maybe this is quite complicated but if you're patient, it's really worth it...imagine that you can understand the meaning of a hard word for a lifetime, so each time you encounter it you'll smile because you've already known the meaning of it...and you won't need a thesaurus again...

The fallback plan:

If you're really curious about the meaning of a word and don't have that MUCH time, then follow my suggestion: borrow an OXFORD dictionary disc from your friend and install it, you just have to type it and voila...there're meanings of the specific word pop in...(it's just a fallback plan, though, remember...)

Happy searching, guys... and also give comments to my solutions, please :)

“I think the more you practice writing, the faster you will get new ideas. I suggest you keep a personal diary of your own, so you can write your daily experiences and how you feel about them, especially the interesting ones. It doesn't have to be long at first; just to get you into the habit of writing daily.

Why don't you try it yourself? Or perhaps are there any other suggestions from other students? Remember, practice makes perfect, friends. Good luck! ^^v”

“Yup, Tommy, I agree with you. We have to wait for some time to get an answer in online-mode. That's why we have to do the self-scaffolding. Thanks.”

“Yes, of course! Maybe we can start from a simple one, then after we are getting used to the process, we can start to make the complicated one..”

“Maybe to compare two things, you have to make an outline first. Therefore, it is easy for you to continue your essay. I hope my suggestion is useful for you.. thax..”.

“This is just a suggestion but reading English novels and magazines really help to increase our vocab...even if it's just a trivial-related-matters magazine or article...”

Providing a reflection

Providing a reflection in reciprocal scaffolding occurred when the students compared what they had not known before and what they later knew after some
teaching-learning activities. There were also other occasions where they looked back on what they had experienced in their learning activities, as described below:

“Sir, I just knew all about this thesis statement lately. I know that we definitely need introductory paragraph, but I didn’t realise that there’s thesis statement within it. And this thesis statement itself plays an important role too in introducing what we'll write later on. However, the body of the introductory paragraph is likewise important since it tells us the background of the thesis statement we make. I think I'm used to enjoying writing much more than I used to. It looks like we have certain formula for this writing. You know,...all those things: The main ideas, the supporting sentences, the topic and the supporting details, which build up a topic sentence, and also the conclusion, which is usually a summary of the reading or the important message that we want to emphasise to the readers.”

“Talking about group discussions, I do hope that the facilitator can facilitate us better by being more active. The members of the groups are expected to be more active too. My question, Sir, HOW CAN THE MEMBERS BE ACTIVE IF THE ONE WHO SHOULD GIVE EXAMPLE IS NOT ACTIVE? I would like to say that Siska is a good facilitator. She is active. She also encourages her members to do the tasks given well. Thanks.”

Providing confirmation

Providing confirmation may cause the students to be more confident in their knowledge construction. This kind of reciprocal scaffolding provides reassurance claimed by some other students. Such verification may enhance the learning quality. This can be well illustrated as follows:

“The Track changes was really helpful for me to identify my essay and check for mistakes that I have made, unfortunately the first time I used it, my essays turned out to be a disaster...hope I can make it better next time..thanks..”

“Brilliant idea, Shanti! A collection of our short stories, right? Is that what you mean? Wow, looking forward if that comes true :D!!!:D!!!:D”

“Siska, you've really got great ideas. They all can help us to enrich our vocabulary, can't they? However, it could take some time for us
to do what you say, but they are still great ideas, though. =) It can lead us to varied words with the same meaning certainly.”

“That's a very interesting way to write an essay, Teo. I'll try it someday. Thanks for sharing.”

Giving an explanation

In the following situations of reciprocal scaffolding, the students were helping their friends by providing explanations. These occasions provided the students with ample opportunities to apply what they had learned earlier. They also had a chance to demonstrate the depth of their knowledge, which can also be shared by anyone else in the learning community.

“I agree with everyone, sir. Track changes is kinda confusing and first time I use it, I always asked many questions to my friend. Luckily, they explained them to me patiently. Thanks guys…”

“To elaborate a topic needs your ability to think over something really quickly. You must have a lot of ideas in your mind. So, read a lot and keep finding more information about anything, especially the up to date ones. After you do that, then you practise making an outline. When you have made your outline, believe me, Elis, everything will be a lot easier to you in making an essay since you have written all the main ideas of your essay before. Good luck and God bless.”

“It's not a good idea, Yenie. You know, everything in our life should be balanced, including the way we write =) I am so sure that it's one of the criteria to make a good essay. We've learned it, Yenie. Don't you remember? So, make everything balanced in every aspect. =)”

Self-scaffolding

Self-scaffolding takes place when a student is actively constructing knowledge within her/himself. It is a process where a student compares incoming information and then adjusts her/his current knowledge structures in the light of that new information (Holton & Clarke, 2006). The process of giving and receiving the information takes place within oneself. Self-scaffolding is important because it contributes to the
development of knowledge within oneself. Bickhard (2007) emphasises “that the development of self-scaffolding skills—e.g. learning to break problems down into sub-problems, moving to simpler and ideal cases, making use of resources currently available that may not in general be available, and so on—constitutes a major field of development in its own right.” (pp. 84-85) He further states that “the scaffolding of the development of self-scaffolding skills should be at the heart of educational design and practice” (p. 85). The analysis of data revealed that the following four types of self-scaffolding actions occurred during the course of this study: (1) providing information, (2) providing a reflection, (3) providing confirmation, and (4) creating awareness.

Providing information

In these instances, the students provided self-scaffolding to provide information to themselves. They attempted to restructure their knowledge by finding more information. These instances thus reflect the processes of self-scaffolding that the students experienced in their learning journeys.

“Owh.. I've just remembered. It's kinda hard for me to compare two things because it shows some similarities. Maybe, I should find some information about things that I want to compare. Am I right ?”

“I always check other grammar books whenever I feel confused about a grammar subject for example when I have to learn about get, have, make, let (self-scaffolding), and also ask and discuss grammar exercises and also the right answers for my last grammar test (about tenses) with my friends. (reciprocal scaffolding).”

Providing a reflection

In their self-scaffolding, there were occasions when the students reflected on what they had learned. They compared the old and new information that they had collected. In the process, they sometimes expressed their experiences as a reflection. The following comments reflect some different situations:
“I think group discussions are great. We can help each other. My group facilitator is very nice. He is willing to help me with my essay... We can also give comments and corrections for our friends. I personally would rather ask my friends than the lecturers because sometimes friends can explain it more clearly. Group discussions also let me know my friends better. We help each other in the discussions.”

“Wow, I thought nobody was going to talk about that. Organisation of ideas. Here’s the thing. I understood that there are both similarities and differences in a C&C (Comparison and Contrast) essay. However, if I remember it correctly, I can only recall the contrasting differences between the woman’s second marriage and her first. Is it allowed to just point the differences without mentioning the similarities? What if there aren’t any similarities at all? I understood everything was completely different between her first and second marriage, which is the whole point of the essay. No?”

“As a beginning I will answer first. Honestly, I have never heard about that kind of writing before. At the first time Mr. Agus explained us about thesis statement, I felt confused. But, from the chatting sessions I can learn and get more examples and explanations about that. So, I can understand and don’t get confused anymore. Same things with Introductory paragraphs, example essays, and process essays. I didn’t know that there are many types of introductory paragraphs. Now, I know that we can use many types of introductory paragraphs for introduction. Keep practising and asking for more explanations are the best way to understand everything. Thanks.. ;)

Providing confirmation

The following comments provide some confirmations claimed by the students after they had been given a suggestion by someone else to do or try something. They attempted to confirm that the suggestions given earlier were useful to solve their past, current or future problems.

“What a great suggestion, Sir! By reading again, we will find the answers to the questions that pop to our mind during the chat session. Thanks.”

“It’s difficult for me to know which is the comparison or contrast, I found it hard to understand because of the similarity, but I’ve tried Ani’s way to find the advantage and disadvantage and I made it :) Thanks, Ani.”
“Thanks Teo. It's a good way to begin if we want to write. I'm impressed ;) I'll remember it next time I want to start writing...”

Providing awareness

In these instances, the students experienced some kind of awareness and this awareness was then shared with the rest of the group in this learning community. These students had been made aware of the reality in their learning journeys. By creating this awareness, the students had scaffolded themselves to reach a higher level of learning.

“Oh my God, thanks Sir, I realise now that with just eight sentences, you can make eight mistakes! That's quite shocking!!! That means one mistake per question! Or you can say that all of it has mistake!!!”

“In the last two weeks, I have been able to understand the importance of ‘planning’ before I write. Outline, topic sentences, and thesis sentence making before actually writing an essay have helped me greatly in being able to think and write more systematically. It also got me realising there's a lot to be done before writing an essay, and that it's not as simple as picking up a pen and writing a diary. There's a need to master an issue inside out before actually writing about it.”

“I also just realised, in writing fiction/story you don't have to write a long paragraph, keep your paragraphs simple but intriguing. It's more effective than write a very long but boring paragraph. In this case, I'm afraid I've written the second category story...”

Transcendental scaffolding

During the analysis of data, it was noted that many of the students went beyond reciprocal and self-scaffolding. Indeed, at times, they almost adopted the role of an expert scaffoldor. Thus, unlike what occurred with reciprocal scaffolding where the actors engaged as equals (knowledge-wise), with transcendental scaffolding, one of the students adopted the role of a more knowledgeable peer (Driver et al., 1994) who–like an expert–actively attempted to induct her/his fellow students into the EFL community of practice. Eight transcendental types of scaffolding actions emerged from the analysis of
the research data: (1) providing information, (2) providing encouragement, (3) providing a suggestion, (4) providing a reflection, (5) giving a direction, (6) providing enlightenment, (7) sharing an experience, and (8) offering a solution.

Providing information

In transcendental scaffolding, the students provided information to help their friends understand a point. On the part of the students providing the scaffolding, this information was based on the knowledge which they had constructed earlier. Some of the comments are exemplified below:

“Compare ===> show similarities. Contrast ===> show differences. Thanks.”

“It's said that we can write causes only, effects only, or both in the thesis statement.”

“Example of a thesis statement: However, we are now trying to overcome its physiological and psychological adverse effects on human beings.”

Providing encouragement

In the process of knowledge building, some students also provided encouragement to their peers. While giving encouragement, they were also applying transcendental scaffolding, as expressed in the following texts:

“Try to write more...like I'm in my private English tutorials, almost every week my tutor asks me to write a paragraph from his textbook.....I also have the difficulty in grammar, but I never care just write it down. Then, when I finish writing, I re-check it again with my feelings.”

“People are wondering what it is in our mind. That's why, share your opinion and thoughts, for who knows, maybe you can change something or even the world with it. That's what I truly believe, that I get something inside that is able to change anything around me. So, express your idea by anything, including writing your thoughts, for people are expecting it. =)”
Providing a suggestion

During this study, there were cases when the students were unable or confused about doing something and their peers would then provide a suggestion to help out. Other students facing the same problems may have also benefitted from the following online excerpts:

"Terry, you can search for the information by Google search, MSN search, library, books, etc."

"Ooh then try to search it with Google, if you want to see the website, with the key search 'cause and effect essay'."

"Do you like to watch movies? Or listen to a new song that you haven't known the lyrics? If so, try to listen to the words that sound new to you. Look up for the meanings in the dictionary. It will increase your vocabulary."

"Teo, I think you have to study again the handouts in Semester I. THE ESSENCE OF WRITING IS THERE. You should try to read some articles in English-languages. Start with the easiest one, such as The Jakarta Post. Then, try to read TIMES, Forbes, or maybe Globe Asia. I suggest you this because if you get use to it, you'll be successful in this semester."

Providing a reflection

In their reflections, the students were encouraged to describe their learning activities. Sometimes, in their reflections, they described important issues which helped them understand a particular concept. They also attempted to connect with their previous learning encounters. These reflections may have provided transcendental scaffolding to other students, as described below:

"I learned in the last two weeks how to make a good essay by (like Sir told us) imagine it like the structure (or outline) of a fish:

1. the head (introductory paragraph, including thesis statement)
2. the bones (body, including topic sentences and supporting sentences, also examples in sentences to support the supporting sentences)"
3. the tail (conclusion)

All of that is necessary and crucial to make a good essay... While I was learning that in class and TI, I also learned that like Sir told me that we must make a strategy first to allure reader to read our story, we must make it interesting and (in my opinion) we should also make an interesting ending at the end, hopefully a 'twist' in our stories... and hopefully a moral lesson, too. I also learned that making a thesis statement wasn't that simple by just mentioning three things but we can also make it in other way, not only mentioning the three things. Otherwise, it'd be a descriptive paragraph, a friend of mine said, and it'd be a boring essay...

And the last is very important but people constantly forget (maybe I even do it constantly without realising it!!!), don't write too much words or too long paragraphs but pointless. A simple but informative paragraph is more important... And feedback or scaffolding is very important to build our writing skills... Very, very important!!! Otherwise how can we know that our writing result is wrong?

That's all that I've learned, thanks for all our sharing. That really helps a lot...

“I just knew that there is a thing called THESIS STATEMENT this week... I never thought there was a broader idea than the main idea.... I also just knew the sequence on how to write a story properly, there's the introductory paragraph with a thesis statement as the last sentence, the body, and the conclusion... I also knew about the definition of a paragraph now because I thought about it; replied and because I read others' replies. That helps... I'm glad these discussions help me... Now I know there's still a chance I can become a good author :) Thanks, ‘Effective Writing’!!!”

“Through these discussions, I’ve been helped to remember all about AN ESSAY, about the definition of a paragraph, about the brainstorming, outline list, etc. Then, through the chatting sessions, I can practise my communication skills because we can share information and give suggestions to others.”

“I have been thinking for a while, then I said to myself, I had replied this thread a few times without knowing the meaning of reflection itself. There are many definitions in the literature of reflection. Mostly, however, I agree that it is an active, conscious process.

My conclusion is although there are many definitions of reflection, the most important thing is start to implement 'having time to reflect' in daily life.”
Chapter Five: Findings

Giving a direction

Giving a direction was also found in the students’ comments. Sometimes, the students were unable to do something and asked their peers for direction. As a result, their peers provided the direction, as exemplified in the following situations:

“You can click 'Tools'. Then activate 'Track Changes' by clicking on it. Correct the mistakes. Thanks.”

“You also can give comments by clicking 'Insert', then 'Comment'.”

“Well, it is quite easy. Just visit www.blogger.com and sign up. Then, sign in and create your blog(s) there. Follow the simple step-by-step procedure and you will be fine.”

Providing enlightenment

During transcendental scaffolding, the students often experienced so-called ‘a-ha’ moments. This may have happened after they were struggling with their problems for quite a while. The following texts may have also provided ‘a-ha’ moments to some other students in the learning community.

“I am enjoying 'track changes'. I can see 'the history' of my essay. Maybe that's why we call it 'track' and 'changes'. Thanks.”

“Guys, I've just known that our purpose in writing Cause & Effect is either to inform or to persuade the reader.”

Sharing an experience

Sharing an experience was an important type of transcendental scaffolding action. The students had a chance to transfer their knowledge from a different perspective or context and they were then able to articulate the advantages of applying the theories into practice elsewhere, as illustrated in the following examples:

“It is advisable for the new starter to make an outline as a must to make the writing much better as it is expected. However, even though we've already got used to writing an essay, we do still need
to make an outline. I personally sometimes don't make outlines. But frankly speaking, I find hard times to think about what I should write next. So, my advice... make an outline first!! It makes your writing process a lot easier. That's what I've experienced. =)"

“No, Jimmy. I don't really think so. Maybe you should check over your writing once again. Basically, if we don't master the grammar, we will find difficulties in writing. However, if we master the grammar, we will still need to know more to make a good piece of writing. For example, we don't learn how to combine 2 or more sentences; we don't learn about the punctuation, and we don't learn how to make a very good paragraph (using thesis statement, topic sentences, etc) in grammar. We only learn this in writing. So, please do examine your writing once again. There are only 2 possibilities, either your essay is structurally incorrect, or your writing is not so well-formulated according to what we've learned in the ‘Effective Writing’ class. So, you decide yourself which one is yours?

Thanks anyway, Jimmy.

Good luck!!”

**Offering a solution**

When some students faced their problems, their friends attempted to provide a solution. The solution given may have been experienced by the students themselves in their previous learning situations. If the students could find a solution to a certain problem, they had reached a higher level of understanding in a certain area, as provided in the following instances.

“Hem.. Maybe you could try to write a diary! Or like when you feel something, you express it with writing...Sometimes I did that! Or you could read a story or watch a movie and, then, retell it again with your own words what you have watched and read! In that way, you could practise your grammar, too..”

“I found my difficulty in comparing two similar things and finding the contrasts in them...I just asked my English tutor and he told me to make a list of these two things in terms of their advantages and disadvantages. Then, from the list, we can find the contrasts...”
Quasi-transcendental scaffolding

In this study, it was observed that before many of the students reached the levels of expertise and confidence necessary to provide transcendental scaffolding, they engaged in a transitional type of scaffolding, termed quasi-transcendental scaffolding. This describes a transitional situation where a student is ready to share her/his knowledge with someone else but is not yet sure whether the knowledge s/he has acquired is trustworthy. In this case, the student needs some kind of confirmation from a more capable peer or lecturer. The indicators of such a situation refer to phrases or sentences, such as ‘if I am not wrong’, ‘maybe’, ‘Do you agree?’, ‘Please ask for some further information’, and ‘if I am not mistaken’. At this stage, the scaffolding is not yet completely removed.

Two types of quasi-transcendental scaffolding actions emerged from the analysis of data: (1) providing information and (2) providing a suggestion. These quasi-transcendental scaffolding actions were not frequently found in the teaching-learning process.

Providing information

In the following instances, the students made some efforts to provide information which their peers required. However, they appeared to have felt insecure in expressing their thoughts. This feeling of insecurity is common in quasi-transcendental scaffolding.

“Hmm as far as I know, maybe, posting a lot and chatting actively helps me to get better scores...”

“I really don’t think so, Jimmy. I have seen some books and all of them have thesis statements. They are either clearly stated or unclearly stated. But they all have the thesis statements. So far, we have already learned how to make clear thesis statements in our introductory paragraphs but maybe in the next semester, we'll learn about the thesis statements that are just implied main ideas in the essays (They are not clearly stated).
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Thanx.

PS: Please ask Mr. Agus for further info.”

“Well,...mmm.... I think we can put some of them in one paragraph, I guess. For example, I can compare something to something else in one essay while at the same time I also mention some examples of those things. However, I think we still should have one specific characteristic of an essay we are writing, so that we can focus on that style of writing. Well,”I don’t know about writing in advanced level, so let's just ask Mr. Agus later... =)”

I think comparison is to compare between two things which still have similarities, on the other hand, contrast is used when we want to discuss two things which do not have similarities at all. and a persuasive essay is an essay about things that you want the readers to believe an argument that you discuss in your essay. (if I am not mistaken...)

Providing a suggestion

In the ensuing examples, the students were involved in quasi-transcendental scaffolding by providing various suggestions to their peers. The suggestions they had made were informative and useful but they were not really certain whether the information provided was right. As a result, they sometimes searched for some confirmation from their lecturer.

“If I'm not wrong, you can write the contrast when you find differences in two things. Through the differences you can contrast them... and you can write the comparison when you find similarities in two things...”

“Although good writing certainly requires good grammar, at this stage don't let our grammar be the stumbling block. Just write first and find the joy of writing. At the same time, try to be more conscious of the repeated grammatical mistakes we make. Writing is much more enjoyable when we don't spend so much time worrying about our grammar. Do you agree, Mr. Agus?”
Table 5.3 describes the scaffolding actions identified in the online discussion forums. Within a duration of four months, the students seemingly managed to have done well in scaffolding their friends. In following scaffolding actions, they seemed to have adopted quite well what was given in the expert scaffolding by the lecturer. The students managed to scaffold their friends as they were encouraged to do so. In other cases, they provided other types of scaffolding actions. These scaffolding actions were provided based on the learning needs which arose during the course.
Table 5.3

**Scaffolding Actions**

<table>
<thead>
<tr>
<th>Expert</th>
<th>Reciprocal</th>
<th>Self</th>
<th>Transcendental</th>
<th>Quasi-Transcendental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing information</td>
<td>Providing information (n=190)</td>
<td>Providing information (n=20)</td>
<td>Providing information (n=61)</td>
<td>Providing information (n=12)</td>
</tr>
<tr>
<td>(n=27)</td>
<td>Providing encouragement (n=12)</td>
<td>Providing encouragement (n=9)</td>
<td>Providing a suggestion (n=15)</td>
<td>Providing a suggestion (n=9)</td>
</tr>
<tr>
<td>Providing encouragement (n=31)</td>
<td>Providing a suggestion (n=32)</td>
<td>Providing a suggestion (n=19)</td>
<td>Providing a suggestion (n=9)</td>
<td>Providing a suggestion (n=9)</td>
</tr>
<tr>
<td>Providing a suggestion (n=19)</td>
<td>Providing a reflection (n=34)</td>
<td>Providing a reflection (n=25)</td>
<td>Providing a reflection (n=7)</td>
<td>Providing a reflection (n=7)</td>
</tr>
<tr>
<td>Providing a reflection (n=2)</td>
<td>Providing confirmation (n=52)</td>
<td>Providing confirmation (n=7)</td>
<td>Providing confirmation (n=7)</td>
<td>Providing confirmation (n=7)</td>
</tr>
<tr>
<td>Providing a stimulus (n=9)</td>
<td>Providing awareness (n=33)</td>
<td>Providing awareness (n=33)</td>
<td>Providing awareness (n=33)</td>
<td>Providing awareness (n=33)</td>
</tr>
<tr>
<td>Providing awareness (n=14)</td>
<td>Providing a remedy (n=12)</td>
<td>Providing a remedy (n=12)</td>
<td>Providing a remedy (n=12)</td>
<td>Providing a remedy (n=12)</td>
</tr>
<tr>
<td>Providing a reminder (n=44)</td>
<td>Providing a summary (n=26)</td>
<td>Giving an explanation (n=31)</td>
<td>Giving a direction (n=9)</td>
<td>Giving a direction (n=9)</td>
</tr>
<tr>
<td>Giving a challenge (n=44)</td>
<td></td>
<td></td>
<td>Providing enlightenment (n=8)</td>
<td>Providing enlightenment (n=8)</td>
</tr>
<tr>
<td>Providing a reminder (n=13)</td>
<td></td>
<td></td>
<td>Sharing an experience (n=4)</td>
<td>Sharing an experience (n=4)</td>
</tr>
<tr>
<td>Providing a summary (n=26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Providing information could be identified in all of the scaffolding types. This is the main aim of scaffolding the students to scaffold their friends. They must be able to go beyond what has been learned. They were expected not only to internalise the knowledge they had learned but they were also encouraged to externalise or extend their knowledge by sharing it with someone else. Providing information seemed to be the common thread that could be found in this study. In this way, the students could help one another in their learning community. Sharing one’s knowledge may also function as a reinforcement on the part of the knowledge giver because it is a situation where that particular knowledge is revisited and recounted to someone else. In this case, the revisited and recounted knowledge will lead to a deeper understanding of that particular knowledge.

Providing encouragement was also commonly found in the discussion forums. It was pleasing to note that the students were attempting to encourage one another in their search for knowledge. This characteristic is very important to maintain a vibrant learning community, where everyone encourages everyone else. They showed empathy to help out their friends who were in trouble. They could be facing a difficult concept to understand or they could be frustrated when attempting to use the correct tenses. It was great to see how the students were sympathetic in helping their friends.

The students were also much involved in providing suggestions. This is closely related to providing encouragement. Realising that their friends were facing difficulties,
some of the students were trying to help out by providing suggestions. Such initiatives are good in the teaching-learning processes. As stated earlier, the suggestions provided by the students may have been easily understood or digested by their peers as their levels of understanding were approximate.

In providing a reflection, the students compared what they had not known before the lessons and what they knew after the lessons. Alternatively, they were also given opportunities for reflection. They were given time to become involved in higher order thinking where they had to be critically aware of their learning journeys. As a result, this scaffolding action can be found in the four types of scaffolding.

What is worth noticing is what was happening in the transcendental scaffolding. Four new scaffolding actions (i.e., giving a direction, providing enlightenment, sharing an experience and offering a solution) emerged in their online interactions. It is evident that learning is a creative process and that once they have mastered the skills, the students may be able to expand themselves to other similar situations, where they can apply what they have learned before. The encounters with the previous scaffolding processes may have helped them provide scaffolding to scaffold their friends in various similar or completely new situations.

Quasi-transcendental scaffolding was not commonly found in this study. Only two scaffolding actions could be identified as quasi-transcendental scaffolding. As discussed earlier, in such situations, the students did provide the scaffolding but they were not confident enough to claim that what they suggested and proposed was right and could be justified. More teacher involvement was still needed.
Knowledge construction through scaffolding

In this section, six vignettes are discussed to explore knowledge construction through some scaffolding processes. For the purposes of this discussion, knowledge construction is not limited to the writing skills only. Rather, it is related to some general knowledge. In this case, it has proven that scaffolding can also be applied elsewhere. Some terms, as explained earlier (i.e., [ES] = Expert Scaffolding, [RS] = Reciprocal Scaffolding, [SS] = Self-Scaffolding, [TS] = Transcendental Scaffolding, and [QTS] = Quasi-Transcendental Scaffolding) are reused to simplify the explanations. Most of the knowledge construction started with a disequilibrium in one’s comfort zone, where they identified a new type of knowledge to accommodate in their repertoire.

Vignette 1: A paradigm shift

In this section, Student 2 experienced a paradigm shift after some discussions with the lecturer. At first Student 1 expressed her efforts to become an independent learner after receiving some feedback from the lecturer. Then, the lecturer reminded the learning community that being independent as soon as possible would be an advantage because the students could not depend on someone else in their learning journey forever. At this point, Student 2 felt intrigued and challenged the lecturer with the concept of being independent.

Initially, Student 2 did not agree with the term ‘independent’ or to be politely stated, she said she did not understand the point being discussed. When she wrote that she was intrigued, she experienced some disequilibrium in her current understanding of independence. She felt she needed to investigate further by providing a lengthy explanation on the concept of independence. She even ended the discussions with a question, indicating that she did not agree with the concept of being independent. At this
stage, Student 2 needed more expert scaffolding from the lecturer to balance her knowledge. The lecturer responded by providing a short explanation and its accompanying website for the student to visit in the hope that the student would explore more on her own so that she could apply her self-scaffolding.

After some discussions with the lecturer and some self-scaffolding by visiting the website, Student 2 finally changed her opinion of the term ‘independent’. She reached an equilibrium state of mind when she shifted her paradigm. She also quoted a statement she obtained from the website provided by the lecturer earlier, which indicated that she had visited the website on her own and she applied self-scaffolding to herself. When she concluded that “to be an independent learner, we still need others to help us”, she was providing the learning community with reciprocal scaffolding, as this was given by a peer and from her own point of view, she was providing transcendental scaffolding to the learning community. Another student, Student 3, joined in this discussion by stating her agreement and the dialog ended with a few words of thanks expressed by Student 2 who had experienced a paradigm shift. The complete dialog of Vignette 1 can be found in Appendix A.

**Vignette 2: Establishing common ground**

In the following situation, the learning community experienced some disagreement among its members concerning the ideas: “Majority rules; minority is silent.”. One student, Student 2, seemingly misunderstood the information given and urged for some clarifications to straighten things up by putting forward a direct question to Student 1: “I’m going to ask you, which one do you think is the majority and which one is the minority here?” Student 2 explained further that in her opinion everyone was welcome to
express their thoughts. She even asked the lecturer for some agreement over the disequilibrium she was experiencing.

The tension was rising when another student, Student 3, joined in the discussion by stating that the minority spoke less than the majority. This was the right time for the lecturer to intervene. In the middle of this confusion, the lecturer was trying to balance both sides by providing a compliment that the discussion was interesting and that it was the lecturer’s job to make the majority become the minority and vice versa. He further challenged the learning community by providing expert scaffolding for everyone to think about this issue. Then, the one who had made the statement, Student 1, tried to clarify the meanings of majority and minority in great detail. In her lengthy explanations, she actually provided transcendental scaffolding because she was reflecting on what she meant by the words majority and minority and that she did not mean to hurt anyone in the learning community. Fortunately, it was accepted by Student 2 who misunderstood and she also explained further that her misunderstanding was that she had never thought of the ideas of majority and minority before. After the reconciliation, the lecturer intervened by stating that communicating online was not easy, reminding every student to produce concise and crystal-clear statements to avoid future misunderstandings. Even a slogan, “all for one and one for all”, was also used by Student 1 to clarify her point, which was also accepted by Student 2. The complete dialog of Vignette 2 can be found in Appendix B.

**Vignette 3: One student’s achievement**

After the mid-term test was conducted and assessed, Student 1 received a perfect score. She was asked by some of her friends in the online discussion forum to share the secrets of her success but she refused to share anything. However, as time went by, she
finally shared with everyone in the learning community how she could get a perfect score.

From her online comments, in which she was trying to reflect on what she had done before the mid-term test, it was found that she prepared herself well for the test by making herself immersed in doing different learning activities and based on the activities, it was confirmed that she had apparently applied the four types of scaffolding (i.e., reciprocal scaffolding, self-scaffolding, quasi-transcendental scaffolding and transcendental scaffolding) in her learning experiences before sitting for the mid-term test. Thus, applying the four types of scaffolding was an advantage for her because it may have contributed an opportunity for her to construct her knowledge further and, consequently, she managed to receive the perfect score in the end. The complete dialog of Vignette 3 can be found in Appendix C.

*Vignette 4: Reaching enlightenment*

In this process of knowledge construction, nine students—together with the lecturer—were involved in the online discussions and during which two students became enlightened after analysing the exchanges of the online texts concerning the concepts of linear and chaotic. The discussion started with Student 1’s question about the meanings of ‘linear and chaotic’, which was followed by the lecturer’s explanation. The two terms were compared, providing expert scaffolding to the learning community. Then, Student 2 joined in but she was not sure about which type was suitable for her and she decided to combine the two. In this case, she was providing quasi-transcendental scaffolding to her peers. Student 3 also decided to combine the two learning styles.

Transcendental scaffolding was provided by Student 4 who described her current understanding of the two terms. At this time, Student 1 joined in again, stating that she
preferred the linear concept but at the same time she was interested to explore the chaotic concept but she was not sure yet and provided quasi-transcendental scaffolding to the learning community. Student 1 was beginning to understand the differences between ‘linear’ and ‘chaotic’.

At the same time, Student 5 experienced some enlightenment concerning the two concepts by stating “Ooo...now I got it:)” and she began to connect her personal experiences with the two terms and she preferred to learn chaotically. While doing this, she provided transcendental scaffolding to her peers. She also described an occasion where she implemented self-scaffolding because she made herself curious to learn things on her own. When she added that she did not like to be limited by a ‘step-by-step’ approach, she was transferring transcendental scaffolding.

The lecturer provided more expert scaffolding by challenging the students to think outside the box with the question: “How linear is linear?” and connecting it to the online learning but provided freedom to the students to decide. Student 3 apparently changed her perspective when she stated that “...we are automatically adjusting from linear to a bit of chaotic style...”. Another student, Student 6, was observing what was happening in the discussions and she finally joined in by admitting that she had not known the meanings of linear and chaotic but that after all of these discussions, she experienced some enlightenment and came to her current understanding. Moreover, she considered herself as a linear person.

Student 7 also expressed her preference to linear but she was sometimes involved in some chaotic activities. In her explanations, she provided self-scaffolding to herself but to the learning community, she provided transcendental scaffolding. Another student, Student 8, also provided transcendental scaffolding by stating her own definitions on the
two concepts and she also provided examples by linking the two concepts with her own preference—the linear style.

Student 9 provided a summary of the discussions so far. She also combined the two concepts in her learning journeys. She tried to implement self-scaffolding in her self-studies and in sharing her experiences, she provided transcendental scaffolding to the whole learning community. The complete dialog of Vignette 4 can be found in Appendix D.

**Vignette 5: A student’s point of view**

In this short dialogue, one student, Student 1, failed to understand a particular concept of reflection. She then asked the lecturer for some explanations. Then, the lecturer intervened by giving a brief description of the problem. However, he did not try to solve the problem himself. Rather, he encouraged the members to help one another. After the brief explanations were provided by the lecturer, a response came from Student 2 who became even more confused. According to her, reflection was what could be seen in front of a mirror. At this stage, Student 3 chimed in by providing transcendental scaffolding in her explanations. The way she expressed her disagreement was interesting to analyse. She did not strongly disagree with Student 2’s opinion. Instead, she confirmed that reflection meant something like what could be seen in a mirror. However, she further continued to explain how reflection was used in a different context, where activities were reviewed and compared and what had been previously unclear became clear then. The complete dialog of Vignette 5 can be found in Appendix E.

**Vignette 6: A lecturer’s intervention**

In this transaction of knowledge, one student’s work was revised by another student but there were some grammatical problems involved in the revised version. At
first, Student 1—a student facilitator—initiated a discussion in her small group by providing a short story to be continued by the other members. From the perspective of the group members, Student 1 provided expert scaffolding. From her viewpoint, she provided transcendental scaffolding to her peers.

A response came from Student 2, who suggested that there were some grammatical issues in the short story provided by Student 1. While Student 2 was critically analysing the short story, she was providing transcendental scaffolding to the learning community. She suggested to use the Past Continuous Tense for the verb ‘walk’. However, there was also a grammatical mistake (i.e., opened wound) in her correction, which she did not realise. Also, at some point in her correction, she was not sure because she could not say it in her exact words, thus, she was providing quasi-transcendental scaffolding. Then, Student 1 responded and admitted her mistakes due to her careless grammar. She also improved the short story as suggested by Student 2 and realised the grammatical mistake with the word ‘opened’ and used ‘open’ instead in her revised version of the short story, which also contained some other grammatical mistakes (i.e., ‘with open wound–without an article’ and ‘letting it died’).

The two students apparently became engaged in an argument and the lecturer finally intervened to provide a solution to clear up the grammatical confusions. The lecturer then revised the short story and provided some grammatical explanations put between brackets. By doing so, the lecturer provided expert scaffolding and put them back on track. The complete dialog of Vignette 6 can be found in Appendix F.
Social interactions in a vibrant learning community

Scaffolding of learning has been identified as a necessary condition for learning in a number of different learning contexts including online learning environments (Brown & Campione, 1994; Cheesman & Heilesen, 1999; and Sorensen, 1999). Within the field of online learning, much of the focus has been on the research and development of technology scaffolds. Technology scaffolds are incorporated within the online learning software systems to structure and facilitate online collaborative discourse and construction of knowledge. Bielaczyc and Collins (1999), however, argue that technology scaffolds by themselves may not be sufficient to ensure that the engagement and interaction necessary for knowledge-building discourse do occur within online learning environments; they contend that social interactions also need to be scaffolded within CSCL (Computer-Supported Collaborative Learning) environments.

The findings from this study tended to confirm Bielaczyc and Collins’s (1999) assertion that scaffolds subsumed within the online software were not enough by themselves to ensure the construction of knowledge. If the students fail to produce meaningful discourse in their interactions, online learning may not lead to their expected learning outcomes, which may include a deeper level of understanding, increased metacognition and development of higher-order thinking (Thomas, 2002). As a result, the lecturer provided different types of scaffolding to ensure appropriate acquisition of knowledge to provide active learning where the students can enhance their learning through such activities (Smart & Cappel, 2006).

In order to scaffold engagement by the students in this study, two forms of social scaffolding had to be employed:
1. Scaffolding engagement by design of topics

2. Scaffolding by organisation of group

Scaffolding engagement by design of topics

The researcher found that one of the most effective ways of scaffolding engagement by the students was to introduce controversy into the online discourse. For example, the researcher found that the topic, ‘Women should stay at home’, was not popular at first and stimulated online discourse poor in both quantity and quality. Almost no one was interested to join in the discussion. The researcher addressed this issue by being deliberatively provocative and disagreeing with every opinion posted by the students. Following the introduction of controversy, the discussions became more heated. One student even experienced a paradigm shift concerning the role of a mother in the household. Initially, she disagreed with the notion of ‘Women should stay at home’ but at the end of the discussion, she changed her opinion. The following are some excerpts of this discussion.

Lecturer’s stimulus:

“Please read the following statement. Either you agree or disagree with it, please express your ideas: WOMEN SHOULD STAY AT HOME. Try to practise writing logically even if you have to agree to disagree. Looking forward to your immediate responses.”

Student A’s response:

“I disagree. For this reason below: Why should woman be tied up at home if she can do something valuable and useful for this whole country...Who found radium? Who emancipated women in Indonesia? It is woman also who had done both of those work and there’re thousands of works that women capable of...being an engineer, women also can do that job, being an astronaut, being a construction worker, women also can do it...So don’t tie up woman at home to do less than she is capable of...”

Lecturer’s intervention:
“You are right, CL. But who is going to take care of the kid(s)? That's why kids are now 'out of control'...:) If only women stayed at home, they could take care of their kid(s). How about that?”

Student A’s response:

“Yeah, you got me thinking hard now...[Disequilibrium] When I read the statement I imagine that women in this position are married but with no children...I completely didn't realise what if they had children. But even with mothers to take care of them, children nowadays are (in my opinion) out of control already...What do you mean by out of control here? For example, at home, the mother takes care of the children, the child is really well behaved but what if at school the child behaves badly and the mother doesn't know it? There's a case like that I believe. There are many factors that can make a child out of control, maybe because of their friends' influence? It can also be the reason for it.”

Self-scaffolding was involved when she admitted that the intervention had caused her to think hard. With this self-scaffolding, she began to see the context of a woman more comprehensively; not only single women or women without children but also women with children.

After some further online discussions with her friends, she finally changed her mind from disagreeing to agreeing but with a new variable, a win-and-win solution: doing a part-time job. This happened after she deconstructed and reconstructed her knowledge through the learning community. She also provided a real example of a working woman who ran her business at home. She even wanted to do what the working woman had done. This was her most recent response after experiencing a paradigm shift:

“Yeah, it's a good way to solve the problem. I just realise after reading your opinion, guys, so I change my opinion a little bit, is that part-time job is the suitable way to solve the problem on where the place of woman is in society. I knew someone who was once my English teacher. She opened a private English course at her home. Later when she became more successful, she moved to a building, also near her house, and she became so successful that she expanded into two buildings, one for children and one for teens/adults. Even her children also took courses there. In the past, she herself taught all the students because there were only a few of
them, now she has a lot of teachers there including herself because the students are bigger now in number. That's just an example of how a part-time job can be a successful and profitable business. I just remember that because of your discussion, guys, the examples convinced me to do so now that I remember about it and she always has time for her children because now she just teaches a class only and the rest of her time is for her children. Perhaps when I get older I will do something like that: working while at the same time taking care of my children. Just want to share, what do you think, is it a valid example? Thank you for changing my opinion or, rather, as I prefer, compromising my opinion."

A second way found by the researcher to be effective in scaffolding engagement was by the introduction of interesting and challenging topics. A heated discussion may be a thrilling occurrence where both the lecturer and students cannot wait to log back in to continue the discussions (Bender, 2003). Akin and Neal (2007) maintain that writing sound discussion questions may boost student participation. Accordingly, in order to maintain the students’ high interests, interesting and challenging topics need to be introduced. In the interviews, they stated that they wanted to get engaged with more interesting topics. It is thus necessary to discuss together as to what to discuss in the next online activities (Gudea, 2008). Such power sharing, involving the students in determining the directions of the course, may enhance language learning (Moreno-Lopez, 2005). In power sharing, the students may also be encouraged to take initiative, responsibility and ownership of their critical thinking processes (Klopfenstein, 2003; Kurubacak, 2005).

Scaffolding by organisation of groups

As stated before, since the students did not have any previous practical experiences in online activities, the discussions were led by the lecturer involving a big group of students. Later on, in order to have more conducive interactions, the discussion
forums were divided into smaller groups, and each was moderated by a student. In the next section, the big group and smaller groupings are described.

In the big group, the students were given opportunities to observe what was happening as it was their first time to interact online in such a way. The lecturer, on the other hand, attempted to provide examples and models in stating ideas and intervening whenever it was needed to do so. Salmon (2004) mentions that “the essential role of the e-moderator is promoting human interaction and communication through modelling, conveying and building of knowledge and skills” (p. 4). All of these were done in cycle one. An example of the discussions in the big group at an early stage is provided in the following texts:

Lecturer:

“What are your main problems in writing?”

Student 1:

“This is the number one problem in writing for me. It's like there's just not much time to write. I always think I want to be a writer but then I think again I have something better to do than to write. There's always a better film, a better cake to eat, etc. And then for me it's really funny to pick up a pencil and share my own ideas to let all the world know.”

Lecturer:

“My only advice is...START WRITING and you will be AMAZED!”

Student 2:

“People are wondering what it is in our mind. That's why, share your opinion and thoughts, for who knows, maybe you can change something, or even the world with it. He..he..he..

That's what I truly believe, that I get something inside that is able to change anything around me. So, express your idea by anything, including writing your thoughts, for people are expecting it. =)”

Student 1:
“Yes, I see, that's why people keep writing and people keep buying books...Thanks Rinto...”

Student 3:

“test... test...”

Lecturer:

“The testing is successful, Jimmy. Now give me the problems you are facing.”

Student 3:

“Just want to say: Good morning, Jimmy....”

Student 4:

“My problems in writing are: grammar usage, how to put a conjunction, put punctuations in sentences, the right vocabularies.”

Lecturer:

“That's normal.... Everyone is facing these problems. Great that you have realised what your problems are. So, do something before it is too late.”

Student 4:

“Sir, last Monday in my private English tutorial, while I was writing a paragraph, I still found problems in developing interesting paragraph contents, so what should I do to develop it? Thanks...”

Student 1:

“I once tried to write a story but the sentences sounded funny and I became discouraged. Maybe my lack of confidence is blocking me from trying again and again.”

Lecturer:

“Don't get discouraged. I used to have the same feeling. Now, I don't care anymore. I want to express my thoughts in writing. What do you reckon?”

Student 1:

“Yes, of course I want people to know my ideas. I don't want to keep them just for myself. It's selfish and it's unhealthy also unproductive. I'll start writing this night. Thanks Mr. Agus...”
Lecturer:

“You are welcome. If we don't write our ideas, someone else will use our ideas.”

Student 5:

“Hmm., seems like; my lack of vocabs, how to choose the right grammar and how to make an appropriate sentence are my main problems."

Lecturer:

“Hmm..This place seems to offer you a chance to practise more and more. We are ready to help you in all circumstances.”

In the smaller groups, which were carried out in the second cycle, the students were given opportunities to manage their social interactions. There were eight smaller groups altogether with each group being facilitated by one student. Based on the observations, some groups worked better than the others. The leadership and structure provided by each facilitator was important to determine the success of the discussions (Garrison & Cleveland-Innes, 2005). With poor leadership, the discussions did not produce any results although the students may have seemed to become active participants and engaged in social interactions. Apparently, nice introductions do not guarantee that the future discussions will be highly conducive where every member contributes something to the discussions.

It was also evident that with the smaller groups, the students were able to interact more (Durrington, Berryhill, & Swafford, 2006) and apply their transcendental scaffolding skills because they were given freedom to manage their own knowledge construction through their interactions as a learning community. The lecturer only participated in the discussions as a community member or challenger (Conrad & Donaldson, 2004), providing directions as to where the students were heading for the
destinations in their learning journeys. The following summaries provide what was occurring in the small groups:

Adinda’s group

Adinda started with this following introduction:

“Hi, everyone. Sorry to start a bit later than the other groups. I was under the impression that the peer teaching program was to start after the mid-term exam, which I'm sure takes a lot of your attention and time. Anyway, many thanks to Pak Agus for trusting me with the responsibility to facilitate for the group. So guys, let's start giving life to the discussion! You can start by posting your comments on the mid-term exam. How do you feel about the tests, are you confident? Do you feel the material for the tests are covered in your studies? I'm thinking about starting with light topics to chat about here, a natural warm-up, just to get yourselves used to writing and posting. So, please post on, guys!” (Adinda’s introduction)

Adinda seemed to be enthusiastic in starting the discussion forums but in the end she only managed to cover two topics without any modelling. Her English was also good. However, she needed many interventions in order to facilitate the discussion forums. She did not show any leadership quality in this learning community. Adinda’s friends liked the way she helped out with their problems in the face-to-face mode. Adinda might have experienced a culture shock with this new learning style, as quoted:

“Ooh, I might not be able to relate so much in elaborating the onion theory, but really I agree with online learning causing some culture shocks around here. I am a living proof. Never been so close to Internet connections and my laptop, not until TappedIn.org shows up as a compulsory part in our writing class. ;) I assure you, not being that well acquainted with doing works on the Internet caused some difficulties early in the semester. I've fortunately gotten myself use to it.”

Some of the members thought that Adinda was a good facilitator, as stated by the following comment.
“Yes, sir. I'm very glad she became my facilitator. She was helping me to understand things. I'm very thankful to her.”

However, the lecturer intervened first before Adinda started the introduction and the other students actively participated in the discussion, as described in the following text:

“Hi Adinda,

You can start the discussions if you want to. Start inviting everyone in your group. Good luck.”

Emily’s group

Emily started with this following introduction:

“Hello guys, WELCOME to this room! please feel free to express your thoughts and ideas about EFFECTIVE WRITING here! Post your work, comments and everything that's related to WRITING! Hope together we can make writing as fun and as interesting as it can be ^^ Thanks a lot.” *(Emily’s introduction)*

Initially, Emily provided more freedom to her members. This made it difficult to get the discussions going. She provided modelling later on. Emily managed to discuss four topics but she did not really interact much. She did more social interactions in the first topic only. In the second topic, she only appeared once. With the last topic, she did not take part in the heated discussions. She provided curiosity in the last topic but she did not really explain her point. Everybody was discussing something related to ‘courting death’. They begged for an explanation but until the end of the discussions, she did not even appear.

Anggie’s group

Anggie started with this following introduction:

“Hello everybody...
Chapter Five: Findings

How was the Mid-term test???

I've got 85. Just like what Mr Agus told me that I shouldn't be proud enough because it's only 20%. I must study harder and for you who got a low score, don't be so upset because you still have chances.

Ehm, where is everybody???

By the way, what topic that you guys like to discuss?” (Anggie’s introduction)

Anggie did not start with a well-structured activity. She was even absent for a while until the lecturer intervened. Anggie only dealt with two topics. She was a less able student. Thus, she seemed to feel insecure in her capacity as a facilitator. The members even reminded her of the topics to be discussed in their grouping. The two topics were not really discussed as no one responded in the first one and only Tessie responded in the second one.

Initially, many students became confused because Anggie did not turn up and suggested what to do in the following excerpts:

“I can't find any topic to discuss yet, but I hope that someone can brainstorm and give me some topic...Anyway, are you still with me, Anggie?”

I think we should wait for Anggie. She will give us the topic to be discussed in this thread.

I've been thinking what we should discuss in this group? I need to know, Thx anyway.

Karen’s group

Karen started with this following introduction:

“Hi, groupie.. Hope we can help each other.. Hehe..” (Karen’s introduction)
Karen started the discussions with a very short but general message. She also discussed two topics for the whole session. She did not provide any modelling. She intervened less and less in the later topics. The lecturer intervened twice in the discussions. After the interruptions, the members of the group seemed to be more engaged in the discussions.

*Siska’s group*

Siska started with this following introduction:

> “Guys, we belong to this group, WELCOME!!! You're free to post anything as long as it's related to writing...BTW, I have to ask you, are you confident with your process essay that you've submitted? Give me the reason, please....And also why don't we discuss about our problems on using TappedIn ®? How often do you open TappedIn ®? I am rather curious...” *(Siska’s introduction)*

Siska provided well-structured activities in the discussions. She was carefully facilitating these discussion forums by providing instant replies. In her first two topics, she provided modelling, as illustrated in the following example:

> “I want to answer it to share with you guys...For me, I'm not really confident with my process essay at first but in today's class someone helped me correct it all and the person really knows what he/she's doing so I become confident about my process essay. And I'm online whenever I have nothing to do... How about you guys?” *(Siska’s modelling)*

In her later topics, she became part of the discussions. Apparently, she was the only student who observed how the online activities were managed beforehand. She also used the expressions used by the lecturer in moderating the online interactions. Despite her other activities, she was able to cover seven topics and was always trying to interact immediately. She almost always replied to anything asked online. Siska was the most active and productive facilitator with more structured activities. As a matter of fact, both in the face-to-face and online modes, she even encouraged her friends to go online.
“Guys who belong to my group: Keep the fighting spirit!!! I wish you're online more often so we can encourage each other more here...”

“Thanks Sir, I think I just have to encourage my fellow group members to post regularly...Ok, I'm working on it :)

Nani’s group

Nani started with this following introduction:

“How... all my group members...;) Glad to know that we have more time to discuss and share about anything related to ‘Effective Writing’. I think this is a good chance to improve our writing skills.

Of course, I am not a person that knows everything about Writing. But, I will try to help you if you have any problems in writing. So, we can learn together and help each other.

I hope all of us are able to give any comments, suggestions, even advice which can improve our knowledge.

Feel free to explore everything related to ‘Effective Writing’. Thanks....
See you soon... Enriko, Petty, Indah, and Sari” (Nani’s introduction)

Nani started the discussions enthusiastically by encouraging everyone to join in. However, she was sick and the discussion forums were not really successful. After she became better and joined in the community, she managed to get the discussions going for quite a while but it was too late because time for the threaded discussions was running out.

Rinto’s group

Rinto started with this following introduction:

“Sir, I just checked and nobody hasn't posted yet. However, I'll tell them tomorrow so that they realise the importance of being active in this TappedIn ® thing. =) Then, hopefully we all could see
Rinto did not really initiate the discussions. Rather, he waited for his friends to react first. He was not really sure whether the members would join in next time. With this kind of introduction, every member did not have any direction where the discussions would go. Accordingly, some members initiated to start the discussions by asking questions. The lecturer even intervened twice before they started the real discussions. In this case, Rinto managed to get many replies from his peers but he actually only managed to cover two different topics. What really happened was he kept promising to provide a topic but he ended up going in circles. He could not make up his mind. Basically, the discussions did not make any progress at all although it seemed that the students were highly engaged in the discussions. Ironically, he realised that they did nothing in the discussions but he did not provide anything new, either. Based on the interviews and the discussion forums, he was also working while studying, as revealed in the following texts:

“Hello guys,...

Wow, so great to know that you guys are still active in this TappedIn ® thing. You've posted so many. They all don't really make sense, though =P Yet, thanks for participating!

However, we've got the topic to talk about.

So, let me figure it out for you first! This is just an introduction, though.

I'm really interested in talking about this type of life, when you need to work while you are still studying. I've experienced it, anyway. And, don't you guys think it is also important to all of us to at least know the world out there that you get yourself use to work? So, to all of you who haven't worked, please just consider it as something very important as well. Just imagine, when you guys need to work while you are still studying in this campus. To work is interesting, though. It can add some experiences in your life, and certainly it will spice it up.
Chapter Five: Findings

*Tomorrow, I'll tell my story when I got into it.*

*I am so sleepy now for I have worked all day long. He..he..he.*
*To you guys, who have worked, share your experience here, will you!? I'll tell you this, especially to all of the members belong to this group. See you, guys!! KEEP UP THE GOOD WORK!!*

The following examples show that some students reminded the facilitator to start the discussions:

*Come on Rinto, pursue your group to send anything to this discussion. Frankly, I've just posted my first writing today.*

*Hi, Rinto.. Maybe, you could give us a topic to discuss.. hehe.. Isn't that a good idea??*

**Shanti’s group**

Shanti started with the following introduction:

“*Hi, guys!! Welcome to this thread! Hehe.. you can do anything in this thread as long as it's still about writing..I'm hoping that with this thread, all of you will have a better understanding in writing..hehe..once again, welcome!!(^_^)*** (Shanti’s introduction)

Shanti provided a warm welcome to every member. Just like Emily, Shanti did not start with any specific topic. She left the members to decide what to discuss. She had given too much freedom to her members with no specific modelling given. As a consequence, the discussions could not start immediately. The lecturer intervened twice and everything became normal once again. In the discussions, there were so many lengthy ‘copy and paste’ texts that the members began to complain.

“*Sorry, I can't help but notice the long writings on these Habitat flood-help thing. What is it? And why is there so much blabbing written about it? Are these articles originally written by a member of this group? If yes, I'm impressed. Or did somebody just copy paste the whole thing? If yes, can anybody tell me what for? I'd like to know, just so I'll be clear about what we are actually supposed to do here. I'm a bit confused with the way irrelevant and*
It was found in the small groups that whenever the facilitators wanted to give freedom, they ended up discussing many topics without any directions. With more ‘authoritarian’ facilitators, the discussions seemed to be focused on certain topics before moving on to other topics. It is, then, necessary to know when to give freedom and when to become ‘authoritarian’.

It was observed that some students seemed to have adopted the techniques used by the lecturer, for example in giving feedback and stimuli or in encouraging their friends. They seemed to be learning something from the examples given by the lecturers.

It was noticed that some active students joined in the other groups, for example: Tessie, Siska, Karen, Yennie, Shanti, and Adinda. These students were actively interacting with other students in the online discussion forums.

**Summary and discussion**

In this chapter, the revised theory of scaffolding has been postulated and the findings confirm that transcendental scaffolding exists and that there is a transitional type of scaffolding, the quasi-transdendental scaffolding, identified in the process before the students are able to provide transcendental scaffolding to their peers. More importantly, the progress from scaffoldee to scaffolder, which is hardly found in any scaffolding processes, has been described. The different scaffolding actions have been compared and contrasted as evidence of scaffolding. Additionally, scaffolding evidence in knowledge building has been described through the six vignettes. Finally, the social interactions managed by scaffolding engagement by design of topics and organisation of groups have
been presented. In the following chapter, the conclusions and recommendations will be discussed.
CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

The main aim of this study was to establish and develop innovative instructional procedures in which scaffolding can be extended and applied in order to enhance social interactions in learning EFL writing skills in an effective hybrid learning community at the university where the researcher is working. Additionally, there was also the need to determine and improve practice and understanding of the relationships between scaffolding and effective teaching of writing. The scaffolding concepts investigated in this study were framed around Holton and Clarke’s (2006) theory of scaffolding.

In order to deal with the research aims, three categories of research questions were formulated:

1. Questions addressing the issues of scaffolding:

   • How can Holton and Clarke’s theory of scaffolding be implemented to enhance social interactions in an effective hybrid learning environment to teach in an EFL writing class?
   • How can Holton and Clarke’s theory of scaffolding be extended to further enhance learning in a hybrid learning environment to teach in an EFL writing class?

2. Questions addressing the problems encountered in a hybrid learning environment:

   • What sorts of problems may occur when a hybrid learning community is conducted for the first time for both the students and lecturers?
• What sorts of interventions can be offered to solve the problems?

3. Questions addressing the issues of social interactions:

• What sorts of activities can be used to get the students engaged in the hybrid learning community?

• What sorts of online social interaction activities might emerge while applying the scaffolding processes?

Each of these three categories of research questions will now be addressed in turn. Following this, the implications of the findings of the study will be presented and discussed. These implications will be presented as a set of guidelines to inform future research and practice in the field of online EFL learning communities in Asian countries such as Indonesia. Following this, the limitations of the present study and recommendations for future research and development in this field will be discussed.

Questions addressing the issues of scaffolding

During this study, it was found that Holton and Clarke’s (2006) theory of scaffolding could be successfully implemented if the sequence of scaffolding was organised in a flexible way to enhance EFL learning. In this study, the following core sequence was used: expert -> reciprocal -> self, which can be modified on the basis of the teaching demands. The expert scaffolder (i.e., the lecturer) found it necessary to model a diverse set of scaffolding actions. The scaffolding actions, which were done in context and based on the learning needs of the students, covered issues such as providing information, providing encouragement, providing a suggestion, and providing a stimulus. Then, through modelling and reinforcement, learning may be enhanced. In reciprocal scaffolding, the lecturer needed to provide opportunities for the students to
interact actively to construct knowledge. Meanwhile, the lecturer(s) also found it necessary to continuously monitor the teaching-learning processes, occasionally reminding the students of the need to go back on track in their knowledge construction, and reinforcing their learning experiences by engaging them in further discussions on certain issues. Sometimes, the lecturer also needed to intervene to remedy situations when students were off track.

In facilitating self-scaffolding, the lecturer found that it was important to set up contexts out of class where the students were required to engage in self-scaffolding. In this way, the students were encouraged to conduct their reflections in order to construct, deconstruct and reconstruct their knowledge. The students also needed to be fully immersed in the materials at hand before they managed to help other students. It was also found that the application of self-scaffolding needed to be proactively encouraged. Self-scaffolding is the stepping stone for the students to become independent learners. If they can scaffold themselves, they may also be able to scaffold their peers, in which case they will be more effective in providing them with reciprocal scaffolding. This will, in turn, enhance the social interactions in the learning community as a whole.

It was found that in order to optimise engagement and learning, the three types of scaffolding identified in Holton and Clarke’s (2006) theory (expert, reciprocal and self-scaffolding) needed to be extended by the inclusion of two other types of scaffolding: quasi-transcendental scaffolding and transcendental scaffolding. The focus on activities in reciprocal scaffolding and then in self-scaffolding provided opportunities for the students to scaffold other students first and then themselves later. That led to transcendental scaffolding where they managed to act as pseudo-experts engaged in the process of inducting their less knowledgeable peers into the EFL community of practice. Before engaging in transcendental scaffolding, where they were unsure of their newly-
acquired knowledge, the students engaged in quasi-transcendental scaffolding. The expert scaffolder (i.e., the lecturer) had an important role to play in the transition from quasi-transcendental scaffolding to transcendental scaffolding by modelling expert scaffolding actions and by providing supportive feedback and encouragement to the students when they were engaging in quasi-transcendental scaffolding. It was also found that the students needed to be made overtly aware of the productive and receptive aspects of scaffolding. The productive aspects refer to active scaffolding provided by a student and the receptive aspects indicate passive scaffolding received by a student.

*Questions addressing problems encountered in the hybrid learning environment and how to tackle them*

Three types of problems occurred when the hybrid learning community was conducted for the first time with the students and lecturers in this study. First, many students experienced technical problems in their online activities. To solve these technical problems, the students were presented with a PowerPoint ® slide show explaining how these problems could be resolved. The students were also encouraged to help other students with the technical issues via chat sessions and discussion forums.

Second, some ‘new’ technical and search skills were needed by the students to become engaged in the online activities such as using track-changes for peer-reviews, critically reading online materials, online searching skills with appropriate key-words, screening information overload, and web-navigating skills. To tackle these challenges, overall reviews via PowerPoint ® slide shows were presented and discussed in the classroom. If the students still failed to overcome these challenges, they were encouraged to see the lecturer in person outside the regular class hours. Some found it necessary to avail themselves of this opportunity.
In dealing with peer-reviews, the students (particularly the less-able ones) were not confident in providing feedback. To resolve this, they were encouraged to engage in the process of providing feedback none-the-less. Rating-scales also were provided in a peer-review worksheet to facilitate the process of generating feedback and also to help them make their evaluations more objective.

Questions addressing the issues of social interactions

During this study, it was found that social interactions and knowledge-building engagement could be enhanced by the careful design of topics. For example, introducing controversy as well as interesting and challenging topics did much to enhance social interactions and quality of engagement. The controversy was introduced by the lecturer’s aggressively contradicting the responses the students had provided and by challenging them to think critically. Initially, the interaction was not vibrant but after a while the discussions became rather heated. Apart from that, the lecturer also made use of interesting and challenging topics such as ‘A Hobson’s choice’, ‘Your weird stories’, ‘Rewards or punishments’, ‘Online=culture shock’, and ‘Puzzling puzzle’, to stimulate discussions among the members of the learning community.

Scaffolding engagement by organisation of groups was also effective in maintaining a robust online learning community. When the students were divided into small groups with a student facilitator appointed in each group, it soon became evident that leadership played an important role in managing the discussions in the groups. Some facilitators successfully managed to produce fruitful discussions while others did not.

In the highly-engaged groups with high-quality knowledge-building discussions, the facilitators provided good leadership while facilitating the discussions. The members
contributed their ideas actively and the facilitators were highly involved in immersing themselves in the discussion forums, creating a vibrant learning community.

By contrast, in the highly-engaged groups with low-quality discussions, the members seemed to be actively engaged in the discussions but in terms of content, there was a lack of knowledge-building discourse. For instance, they kept on discussing what topics to choose and everybody provided one topic with their own arguments. They had failed to construct knowledge during the activities. Some lecturer intervention was necessary to keep the discussions rolling.

Most of the groups were moderately-engaged. The members were neither enthusiastic nor taciturn. They were involved in the discussions as deemed necessary. They may have experienced a culture shock in this new learning style, as experienced by one of the facilitators and discussed in Chapter Four. As a result, they failed to interact intensively and comprehensively.

Two groups, however, were poorly-engaged. In the first group, the facilitator was seriously ill and was unable to carry on with her activities as a facilitator in the small group. The lecturer intervened to provide further guidance. When the facilitator regained her health, it was too late because the time for the discussions was over. In the second group, communication to construct knowledge was not successful because the facilitator was not confident enough to lead discussions. She tended to postpone initiating discussions or provided late responses. The lecturer provided expert scaffolding to remedy the situations.
Implications

The outcomes of the study have implications for both research and practice in the field of scaffolding pedagogy in ICT-mediated EFL learning communities. Therefore, the implications of the outcomes of the study have been compiled into four sets of guidelines to inform future research and practice in this field:

1. Guidelines for introduction and maintenance of scaffolding
2. Guidelines for enhancing social interactions and knowledge-building discourse
3. Guidelines to inform selection/design of online learning management systems
4. Guidelines to address potential technological problems including provision of feedback

Guidelines for introducing and maintaining scaffolding

- Scaffolding needs to be introduced to the students in the F2F mode before proceeding onto online mode for a period of at least four hours over a number of days to ensure the quality of the social interactions,

- The sequence in which the five different types of scaffolding (i.e., expert, reciprocal, self, quasi-transcendental, and transcendental) are introduced to the students needs to be organised in a flexible way to enhance EFL learning and when necessary be modified to meet students’ problems and concerns as the lessons are progressing,

- Lecturer(s) need to carefully model scaffolding in context and based on the learning needs of the students, expert scaffolding actions such as: providing information, providing encouragement, providing a suggestion, providing a reflection, providing a stimulus, providing an awareness,
providing a remedy, giving a challenge, providing a reminder, and providing a summary,

- Lecturer(s) need to constantly remind the students about and encourage the use of different types of scaffolding actions,

- To encourage the development of reciprocal, self, quasi-transcendental and transcendental scaffolding within students, lecturer(s) should provide post-instructional activities outside of class where students are required to build on and extend their in-class knowledge-building discourse, and

- Lecturers need to overtly make the students aware of the productive and receptive aspects of the five different types of scaffolding so that they may improve their learning activities.

Guidelines for enhancing social interactions and knowledge-building discourse

- Lecturers should select interesting, challenging and at times controversial topics for the students to write about,

- To maximise engagement, lecturer(s) should organise the students into online groups of five to seven students, and

- To maximise knowledge-building discourse by small online EFL groups, the lecturer(s) should select as group facilitators students who have: (a) leadership skills, (b) high levels of self-confidence, and (c) EFL writing knowledge and skill above those of their peers within the online group.

Guidelines to inform selection/design of online Learning Management Systems

- The Learning Management System used to facilitate online learning should have a user-friendly navigation system,
• The system should be able to facilitate social learning via chat sessions and discussion forums, which can be archived online,

• Ideally, the system should also have various objective and semi-subjective online testing facilities that provide instant and accurate online assessment feedback. All these tests need to be assessed automatically, instantly and accurately online, and

• Most importantly, the system must provide security so that the students feel secure in their learning interactions.

Guidelines to address potential problems including provisions for feedback

• Students should be provided anytime/anywhere online access to instructions and answers to Frequently Asked Questions (FAQs) about the online Learning Management System and the other computer-based resources utilised in the hybrid learning community,

• Students should be provided with specific chat-lines and forums where they can share their problems and their solutions to the problems with other students in the learning community, and

• Students should be provided with rating scales and other providing feedback tools to scaffold their development of skills in providing feedback.

Significance

As is implied in the set of guidelines presented in the implications section of this chapter, the outcomes of this study have both theoretical and practical significance for the fields of scaffolding pedagogy for online learning communities and EFL research and practice.
Theoretical significance

The theoretical contributions of this study should be noted. The theories of scaffolding have been revisited and expanded. Two other elements have been added, namely: the receptive and productive parts. With the productive part, a new type of scaffolding, termed transcendental scaffolding, was observed and elaborated in detail. This type of scaffolding refers to the use of active scaffolding provided by a student to help someone else. One transitional step before moving to this transcendental scaffolding, the students will experience the quasi-transcendental scaffolding. As the name suggests, it refers to a condition where the students can provide knowledge to their peers but they still need some further confirmation and guidance from their more knowledgeable others, particularly the lecturer. Once verified, the information may be assimilated or accommodated to the students’ existing knowledge. Learning outside the scaffolded areas may signify a chaotic creativity, where information may be managed in a non-linear fashion. This condition is analogous to the very nature of online sources which provide the students with hypertext media.

The scaffolding actions also offer another contribution to the theory of scaffolding. Different actions may be facilitated to assist our students in their search for better knowledge. As it follows the constructivist perspective, final answers will never be provided to the students. They are encouraged to form this meaning making process. Each stage of knowledge construction will be followed by another. As the students are more mature in their knowledge construction, the scaffolding is slowly removed and they become independent learners, being responsible for the decisions they have made in their personal learning journeys.
Chapter Six: Conclusions and recommendations

Practical significance

A major outcome of the study has been a pedagogy for scaffolding in the field of ICT-mediated EFL learning. This study thus has substantial practical significance for both teachers and university administrators considering the introduction of hybrid learning environments into their courses. With the new elements (productive and receptive) and two new types of scaffolding (quasi-transcendental and transcendental scaffolding), the processes of teaching and learning can be carefully scaffolded and enhanced and knowledge construction may happen either individually or socially in the learning community. The students may benefit from applying the scaffolding processes in their teaching-learning activities, as they are reminded of the guidance they will receive throughout their studies.

The sequence of providing scaffolding may also be adjusted to meet the needs of the educational atmospheres concerned or to provide a variety of teaching techniques. Otherwise, the most basic expert-reciprocal-self-transcendental sequence can be introduced and applied to guide the students in their learning adventures. The students need to be aware of such scaffolding processes so that they can also set the same standard to reach their learning objectives.

With an increasing awareness of the scaffolding processes, students can improve their learning activities and expand this awareness to learning opportunities in other subjects so that they can become engaged more meaningfully in their search for knowledge.

The scaffolding processes have contributed to the students’ knowledge construction. The results of this study clearly indicate that when transcendental
scaffolding is combined with the other three types of scaffolding (Holton & Clarke, 2006), scaffolding does facilitate learning.

## Limitations

During the course of the study, these three following limitations were noted:

1. The number of and the prior experiences of the participants
2. Duration of the study
3. Technology

*The number of and prior experiences of the participants*

The research participants in this study used a hybrid learning environment for the first time. This may have slowed down the learning process. With hindsight, the researcher would have instituted an extra time span of five weeks to make all students more comfortable with the new online learning environment.

*Duration of the study*

Only two cycles of action research were conducted in this study. Therefore, it can be argued that the students (and the lecturers) were not provided with adequate time to acquire, practice and consolidate knowledge not only about how to optimally utilise the learning management system and the computer-based tools, but also many of the scaffolding actions. Also, the students probably needed further time to better understand the new learning styles implicit in the hybrid learning environment.

With this new learning style, students needed time to practice and perfect. Furthermore, they need to be closely monitored and scaffolded over a period of many weeks. Otherwise, they will take part in the teaching and learning processes but they
may only gain superficial or temporary knowledge (Davies, 2006). Because of the short duration of this study, the researcher suspected that many students still considered that learning was a transactional process. If they were asked to do something, they would do it. Otherwise, they would not do anything. This viewpoint is not consistent with the notion of independent learning notionally being facilitated by the online mode.

*Technology*

On the technological side, four major issues impacted on this study: the hardware, LMS software, bandwidth and online security.

The students had different computer specifications which resulted in problems when going online. With the newer computer specifications, they seemed not to have any problem in accessing the online materials, discussion forums or chat sessions. However, some with older computer specifications seemed to negatively impinge on the online activities.

The software used was an open-source LMS, called TappedIn ®. TappedIn ® is based in the USA and this made it difficult to login and take part in the discussion forums or chat sessions, apart from the fact that the Internet connection was also slow. Once there was a one-week connection problem when the undersea Internet wires off Taiwan were disconnected after an earthquake. Ideally, a program installed in the university server could have been be used to support the online learning. But at the time, MOODLE ®, which is now adopted as the main university LMS, was not up and running at that time.

Many students, with their diverse computer specifications, experienced some technical problems concerning the bandwidth when accessing their online activities. The
downloading and uploading speed was so slow that sometimes they had to restart their computers because they were frozen.

Another issue which arose in the online activities was that everyone should be given some security measures. They needed to register themselves and have their identities verified. In that way, they are authorised to join in the online activities. Otherwise, anyone can join in and this will affect the scaffolding processes because the uninvited guest can distract the students’ attention and, as a result, a feeling of insecurity prevails. With TappedIn ®, everyone should register and verify their identities but guests may be allowed to participate, particularly in the chat sessions.

**Recommendations for further research**

In order to confirm the efficacy of the theoretical constructs generated during the course of this study, further research in this field would need to adopt a more rigorous methodology than that adopted in this study. Thus, the recommendations for further research cover four areas of interests: reiteration of the research, assessment system, scaffolding-to-scaffold paradigm and scaffolding in the Web 2.0 era.

Reiteration of the research

This research needs to be reiterated in further cycles. A larger number of participants need to be considered so that generalisation of the data interpretation can be realised because it will represent a wider community with its emerging complexities within a certain period of time. In addition, this research reiteration can also be implemented in any other skills or content courses offered in the English Department such as ‘Structure 1’, ‘Reading 2’, ‘Classroom Management’ or ‘Sociolinguistics’. It will be worth investigating to see how the hybrid learning environment is extended to those
skills or content courses. Furthermore, such extended research may be utilised to validate how knowledge construction is occurring within the scaffolded areas in different courses.

**Assessment system**

A valid and reliable assessment system in scaffolding processes, particularly in the transcendental scaffolding, needs to be developed. With such an assessment system, learning developments or successes via the scaffolding actions can be carefully monitored and measured more closely.

**Scaffolding-to-scaffold paradigm**

The processes of scaffolding-to-scaffold in smaller groups need to be encouraged, especially to see the patterns how the students are engaged in their social learning. In these scaffolding-to-scaffold processes, the lecturer is basically scaffolding the student facilitators who will consequently scaffold the group members in their smaller groups. Each student facilitator may become the extension of the lecturer in leading the discussions and knowledge construction as the lecturer provides the modelling in handling the discussions to construct knowledge together in this learning community. Such activities may provide ample opportunities for the students to apply reciprocal and transcendental scaffolding to their peers.

**Scaffolding in the Web 2.0 era**

Web 2.0, which consists of mainly social networking applications, has provided new different features which may support better ways of online learning. The wikis, podcasts, and mashups, if used properly in education, may contribute a new dimension to learning. Handheld devices which can be connected online 24/7, such as BlackBerries, iPods, and PDAs are now getting cheaper to own and may be useful tools for learning.
These ultra-modern conditions bring a new perspective for research in the application of scaffolding actions within an EFL hybrid learning environment.

**Concluding remarks**

The hybrid learning environment enriches the students’ academic journey. On the one hand, the face-to-face mode provides instant solutions to their problems in the classroom because they can collaborate physically both with their lecturer and peers to construct knowledge together as a learning community. On the other hand, the online activities offer borderless possibilities to explore a wealth of relevant materials not only for future references but also for reinforcement and consolidation of their newly-acquired knowledge in certain areas.

Both the face-to-face and online modes seem to complement each other in providing unlimited opportunities for the students to reinforce what they have learned before. It provides more opportunities to embrace the subject matter more deeply, which then enables for reinforcement and consolidation of the subject matter to occur.

By applying the scaffolding concepts, the students may equip themselves with the necessary tools to improve themselves in their future courses until the completion of the undergraduate program they are taking. Finally, when they graduate, they will be able to actualise themselves in the workplace because the previous experiences and encounters with the scaffolding processes may have been inherent in themselves to tackle future problems which may arise.

When involving EFL students in hybrid learning environments, self-scaffolding needs to be proactively encouraged. Self-scaffolding is the stepping stone for the students to becoming independent learners. If they can scaffold themselves, they may
also be able to scaffold their peers, in which case they will be more effective in providing others in their learning community with reciprocal scaffolding. This will, in turn, enhance the social interactions in the learning community as a whole.

The importance of having students participate in small groups cannot be overestimated. However, when students are divided into small groups with a student facilitator, the selection of the student group facilitator need to be given careful consideration. Leadership plays an important role in managing the discussions in the groups. Ideally, the student facilitator should have leadership skills, and EFL knowledge superior to that of her or his peers in the small group.
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APPENDICES

Appendix A: Vignette 1

A paradigm shift

Lecturer:

“WOW, this is also GREAT, AF! If you can learn this way, you can become an independent learner. That is the ultimate aim that we are going to achieve.”

Student 1:

“I am trying to be an independent learner. But I realise, to be an independent one, I have to have some strong scaffolding. My scaffolding will be strong as a rock if I do have good cement to make it compact.

I still need a lot of guidance from all the lecturers. But in here, the lecturers' role is not as much as in traditional learning style. The lecturers are only facilitators for me—for us; the students must be active in order to make strong scaffolding.”

Lecturer:

“You have to start to be independent as soon as possible. Someone may help you in your learning journey but for how long?”

Student 2:

“I'm intrigued by your sentence, Sir: "Someone may help you in learning journey for how long?" I know my following comments might be wrong but anyway I don't quite get the point...[Disequilibrium]: the student needed more expert scaffolding to balance her knowledge

What do you mean by independent in this context? Do independent learners need no friends/others at all? How independent can a learner be if he/she didn't have friends and others to help her/him? We always need others, even though you call it independent if we learn it by ourselves, but what can cause those inspirations that brought us the change? Of course, the others.

We're always learning in our life and we're always being helped by others either we realise it or not, directly and indirectly. We always received help all the time but maybe we just didn't realise it...So the
'independent' term makes no sense to me. How independent can you be??” [Disequilibrium]: She ended the text with a question. This indicated that she did not really agree with the previous statements made concerning the concept of being ‘independent’.

Lecturer:

“Thanks for your inquiring mind, CL, but this is part of the solution(s)...:)

“Independent Learning focuses on creation of the opportunities and experiences necessary for students to become capable, self-reliant, self-motivated and lifelong learners. What is desired are students who value learning as an empowering activity of great personal and social worth.”[ES]: the lecturer intervened and provided a quotation taken from the website.

See the following website for further information:

http://www.sasked.gov.sk.ca/docs/policy/cels/el7.html

[ES]: encouraging the students to explore more, applying their self-scaffolding skills.

Student 2:

“Oh OK, I get it so we also need others in order to be an independent learner: [Equilibrium]: The student reached an equilibrium state of mind.

"Independent Learning is that learning in which the learner, in conjunction with relevant OTHERS, can make the decisions necessary to meet the learner's own learning needs." (Kesten, 1987, p. 3) -> that's the line from the website that you gave me...

To be an independent learner, we still need others to help us.” [RS]-[TS]

Student 3:

“YOU HAVE A VERY CLEAR POINT THAT I CAN’T AGREE MORE. The people who never help others but cause more trouble to the others will never go forward.”

Student 2:

“Thanks Karen...for your opinion, I greatly appreciate it :)”
Appendix B: Vignette 2

Establishing common ground

Student 1:

“DISADVANTAGES:
Majority rules....

Minority is in silent....

ADVANTAGES:
Help us to improve our English.

Encourage us to be better in online style.”

Student 2:

“I'm going to ask you, which one do you think is the majority and which one is the minority here? And I don't even know that there're majority and minority in the chatroom...What did the minority want? And why they didn't speak up to be heard at all?[Disequilibrium]

I mean I thought we're all welcome all thoughts about writing here, in the chatroom. Isn't that right, Sir?”

Student 3:

“I think maybe the minority speak less than majority...”

Student 2:

“What do you mean, Karen? I don't feel I'm a part of both the majority and the minority...What are you then if you understand who are the majority and the minority..?”

Lecturer:

“That's very interesting.... Anyway, it is my job as a moderator to make the majority become the minority and vice versa....:-) On second thoughts, I think in this online community, everyone is involved in making this community a vibrant one. How about that?”[ES]
Student 1:

“Yes, I agree entirely. There mustn't be any majority/minority here...I used the word 'majority' here for the people who are active. And the 'minority' refers to the ones who are not active.

I do hope that everyone in this EW Group helps and encourages the people who are not active yet or less active to be more active.

I do hope that we all succeed in the future.

I do hope that there will be no misunderstanding here because I used the word 'majority' and 'minority'. I didn't mean to hurt someone else's feeling. I also didn't mean to divide this EW Group into majority and minority.

About what the minority want, I don't want to answer it, because what I was trying to say that:

We have to encourage the ones who are not active yet to be more active in the discussions. Automatically, if they are active, we can 'hear' their opinions and thoughts. ” [TS]

Student 2:

“Thank you for your detailed explanation...I just didn't understand your words back there and now they're all clear...

That was primarily because I never ever think that there're such things and yeah, we must never divide this group into two categories...So once again, thanks for your further explanation.”

Lecturer:

“Apparently, communicating online is not that easy. For that reason, we need to produce concise and crystal-clear statements. Otherwise, misunderstandings will result in and that can be hazardous!!!!!” [ES]

Student 1:

“I am in the process to be a better person. I think everyone is in the process too.

It's better for us to support everyone in this group. Like I have said before, Sir, it's has been a challenge for us to make the 'utopia' condition into reality.

'All for one. One for all'

I do hope this slogan still exists in positive ways.”
Student 2:

“Yeah, I hope the same too...You put nicely there...I mean the slogan is perfect for the condition...I do hope that all comes well and clear to us...”
Appendix C: Vignette 3

One student’s achievement

Student 1:

“Mind if I post another one?

Hmm as far as I know, maybe posting a lot and chatting actively helps me to get better scores...[QTS]

And then I also studied the PowerPoint ® slides that we've already been explained before in the class. I also printed them so I could take a look at them before the test, also I read from the photocopies that the lecturer had given us especially types of introduction and types of conclusion...[SS]

I tried to imagine each type of introductory paragraphs and also when I wrote the assignments, I actually had used the turnabouts technique so I was familiar with it... So just use different kinds of introductory paragraphs and conclusions at each assignment...[SS] - [TS]

I also sought helps and critics from my friends [RS], especially the experienced ones... From that inputs, I realised I had some trouble with my grammar and I bought a book about common mistakes in grammar [TS] (you also can borrow it from me). That's all I can say...

The important thing is : Just be prepared for the exam, I mean if you don't have all the materials, ask your friends to lend them to you...Don't wait until the morning BEFORE the test...”[RS] - [TS]
Appendix D: Vignette 4

Reaching enlightenment

Student 1:

“Sir, I don’t understand linear nor chaotic.. Please explain, thank you.” [Disequilibrium]

Lecturer:


Some other people, like me, prefer to study in a chaotic manner. They study without any particular steps. Yet, they manage to synthesise what they have learned later on.

Still, some other people prefer a combination of both styles. On certain occasions, they prefer to have the linear style; while on other occasions, they prefer the chaotic one.” [ES]

Student 2:

“Yes, like most of people, I chose linear style rather than chaotic :) the reason is if I use chaotic, I won't be able to concentrate, in other way, I will be more organise I use the linear style... but I would like to try to combine the linear and chaotic style, who knows that it'll work for me? hehehe...” [QTS]

Student 3:

“I will combine two of them, because it depends on the situation.”

Student 4:

“I prefer learning used "LINEAR" or step by step. I prefer linear, because we learn something from the basic to expert. If I use the "CHAOTIC" way in learning, I'm sure that I will never understand the lesson.” [TS]

Student 1:

“I like linear. Nothing is better than learning it step by step. But it seems chaotic is interesting too.. Maybe we should experience it a lot.. I believe in the working field, we have to know how to learn chaotically.” [QTS]
Student 5:

“Ooo...now I got it :) [Enlightenment about linear and chaotic concepts]

If those are the definitions for ‘linear’ and ‘chaotic’, then I’ll have to choose ‘chaotic’. It's more like me. I usually study without any particular steps and without any set periods of time. I ‘swallow’ everything down, but I ‘digest’ it later in my own timing. By ‘digesting’ here, I meant sorting out which ones I've already understood and which ones I need to focus on more. When I was still taking classes, I used to do this by skipping a few basic steps and trying to take on more difficult challenges. [TS]

If I found those challenges too difficult, well...I worked things out myself (or in Indonesian: ‘ngotak-atik sendiri’ (‘playing around alone’) and learned a lot from that experience. Because I'm making myself curious, eventually I learn things without even realising it. I learn better that way than having someone to just spoon-feed me. It's more fun to immerse myself in the learning process; it's more rewarding. It's just like the So Klin (soap powder brand) advertisement: ‘Berani kotor itu baik.’ (‘Getting dirty is good.’) [SS]

Chaotic learning works best for me probably because I can learn fast, I'm creative by nature (thank God for that) and a bit of a ‘rebel’ in learning. I don't like to be limited by a ‘step-by-step’ approach. I like to explore new things myself. I know it sounds selfish, but in learning, my principle is: Let me do it myself, my own way. [TS]

Hey, how about the others? Are there any other ‘chaotic’ learners besides Pak Agus and I? :) Happy learning! ^^”

Lecturer:

“Well, although learning in the classroom seems to be linear, if we look at it more deeply, it could be chaotic somehow. How linear is linear? There seems to be a certain degree of chaos involved somewhere in the linear fashion. Don’t you think so? [ES]

Ooopssss, one more thing... with the introduction of 'ONLINE LEARNING' on our campus, whether we like it or not, we are adopting this new chaotic concept of learning, particularly while we are dealing with hypertext sources with our hypertext minds...:-)

You may disagree with me...:-)” [ES]
Student 3:

“Yes, of course....Without we realise about it, we are automatically adjusting from linear to a bit of chaotic style...” [A change in perspective]

Student 6:

“I don't really get the meaning of linear and chaotic but after I read some of the answers above I think I study in a linear way because I'm not a quick thinker so I have to learn something slowly or step by step and finally I can understand it..” [Enlightenment of the linear and chaotic concepts]

Student 7:

“I actually prefer linear way but sometimes undeniably I just want to jump and jump to other topics as well so both are OK with me because when we learn I think we must be able to master those two styles. The example is that when I have a test sometimes I make a summary, I have to make it in order (linear) but sometimes I become impatient and just move to other lessons first and then go back again to the previous lesson.” [SS] - [TS]

Student 3:

“Sir, I think that no one in this world is 100% linear or 100% chaotic, right?”

Student 8:

“Linear is based on the idea that by reading a book or by following a planned curricula one can learn. On the other hand, chaotic learning is based on feed-back loops. For me, I prefer to use linear learning because I can learn based on the curricula that has been given and I know what I have to learn.” [TS]

Student 9:

“I am naturally a chaotic person, not just in learning. Haha. No, seriously. Given an M-Time or P-Time radar, I’d have to be put in the extreme end of the P-Time. So, come to think of it, it’s perhaps only natural that most of my self-studies have been done in a chaotic manner. But I try to be linear, too. I think the combination of both would be best, but for that we have to completely recognise ourselves in terms of learning. To what extent can we be linear, and what are our boundaries in chaotic learning, so we don't overdo either one of them? I fully agree with Pak Agus on how a chaotic fashion of learning is naturally introduced by the integration of the online system. Every information is google-
searched, and that in itself I find super-chaotic. It gives me the natural instinct to scan and skim, though.” [SS] - [TS]
Appendix E: Vignette 5

A student’s point of view

Student 1:

“Sir, what is mean reflection? Please explain it to me..Tx..”
[Disequilibrium]

Lecturer:

“Reflection is thinking about thinking. Confused? Well, it is related to what you didn’t know and then you tried to learn something new and then you are trying to compare between what you didn’t know then and what you know now. Can someone else help Petty?”[ES]

Student 2:

“I'm confused too..I think reflection is what we are seeing in front of the mirror..Hmm..Is that related?”[Disequilibrium]

Student 3:

“May I try to help you Hera? Reflection is (right) is what we see every day with mirrors..But reflection here means deeper, like you see your past activities, you review your activities in the past, especially in this EW class. What have you done in this site and in EW class. What had you learned? What had you done? What had you chatted about? What things that were previously unclear now clear to you? Things like that. Things that we had done in this EW class...”[TS]
Appendix F: Vignette 6

A lecturer’s intervention

Student 1:

“Guys, we’re opening a story continuation here so please continue this story to make it into a totally different story...Enjoy!!!

One day when I walk at the beach, I saw a dog with an open wound in its leg. I try to take it home but I'm also afraid of dogs...!!! I always run or stay away from dogs as many times as possible but I also can't let it just get badly hurt. Finally I make a decision to abandon the dog...That night I had a nightmare about... (please continue :D)”

Student 2:

“Before I continue it, may I correct your grammar a little bit?

One day when I walk at the beach, I saw a dog with an open wound in its leg. I think that it should be "One day while I was walking at the beach, I saw a dog with an opened wound on its leg"

I try to take it home but I'm also afraid of dogs...!!! I guess it should be "I tried to take it home, but I was afraid of dogs...!!!" because you make the first sentence in past tense <remember I saw a dog...->

Then, the next sentence isn't a good sentence, either... I always run or stay away from dogs as many times as possible but I also can't let it just get badly hurt. <It just doesn't fit the context, I can't say it my exact words...can you just read it again?>

"One day when I walk at the beach, I saw a dog with an open wound in its leg. I think that it should be "One day while I was walking at the beach, I saw a dog with an opened wound on its leg".

>>>I totally forgot about past tenses, how could this have happened? I don't even know! You're right, it should be in the Past
Continuous Tense but the wound should be AN OPEN WOUND, I think, because it really is open not OPENED, if it's opened then it must be forced to open and in this situation it's not correct, what do you think?

"I try to take it home but I'm also afraid of dogs...!!! I guess it should be "I tried to take it home, but I was afraid of dogs...!!!" because you make the first sentence in past tense <remember I saw a dog...>"

>>>OK, this is also right, Dina...talking about my careless grammar...>_<

"Then the next sentence isn't a good sentence, either...I always run or stay away from dogs as many times as possible but I also can't let it just get badly hurt.

<It just doesn't fit the context, I can't say it an exact words...can you just read it again?>"

>>>OK, maybe we should change that to:

"I'd run or stay away from dogs when I encountered dogs in the past because I was always afraid it might bit me... but when I saw this dog with open wound, I didn't run because I saw that the wound was really serious and I just couldn't run, letting it died." What do you think? Is that good enough?

Please feel free to correct the grammar. I really appreciate it...:D This is what I like about scaffolding...We learn together to become better writers. Being the facilitator doesn't mean that I'm free of mistakes apparently."

**Lecturer:**

"Perhaps, I can help....

**Revised version:**

One day, while I was walking at the beach, I saw a dog with an open (note: open is an adjective) wound in its leg. I tried to take it home but, as a matter of fact, I'm afraid of dogs!!! (note: You can use the present tense here because it is still relevant now) You know, I always run or stay away from dogs as many times as possible but, at that time, I just couldn't let it get badly hurt. Finally, I made a BIG decision to abandon the dog...Later that night, I had a nightmare about... (please continue :D)" [ES]: The lecturer intervened to put them back on track.
Student 1:

“Thank you very much, Sir...Everyone, will you kindly continue the story, please? Later we will correct each other's grammar and also give comments about it. Thank you.”