

The spring cycle blended curriculum model for teaching paragraph writing



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This proposal describes the features of a curriculum model that can be used to develop paragraph writing skills for university students who fail their Qualifying English Entrance Test (QET). The model called the Spring-Cycle Blended Curriculum (SCBC) Model combines the strengths of two learning pedagogies namely blended learning and scaffolding for the design of a new curriculum. The initial simplified version of the curriculum was piloted for the module HW001, English Proficiency at the Nanyang Technological University (NTU) in January 2007. It was found that the model was effective in achieving the target learning outcomes for students within shorter contact hours with the tutor. The model is currently being implemented and evaluated on a full-scale for HW001. Survey findings from the earlier pilot showed that students both enjoyed and benefitted from the new model. The study by Thanasingam and Soong (2007) on the online oral skills activity used in the model also supports this. One implication of the success of this model is its potential of being adapted and customized for other learning contexts both in and beyond Singapore.

Keywords: blended learning, scaffolding, writing skills

Background: The origins of SCBC Model and the 3-week cycle tutorial structure

There was a need to maximize the effective deployment of staff resources for teaching HW001, English Proficiency (EP) in the Language and Communication Centre (LCC), of the Nanyang Technological University (NTU). This led to a restructure of tutorials in this module. The proposed tutorial structure resulted in an increase in staff–student ratio and a decrease in staff contact hours with students. The tutorial structure proposed was one in which a whole class (25 students) met for their first tutorial (T1). They then met either online (T2/T3) or face-to-face (T2/T3) as half a class in groups of 12 or 13 for the subsequent two tutorials. Table 1 shows how the whole class meets for a workshop session (T1) and then for online tutorials or face-to-face consultation in groups that are labelled alpha or beta. With the new structure, students are only required to attend class twice in 3 weeks with the alpha and beta groups alternating. The tutor only meets the whole group of students in T1, once in a cycle. The tutor will be with half the class each time for the subsequent two meetings. While one half of the class meets the tutor in either T2 or T3, the other half will complete their tutorial online.

The restructure of the tutorials posed a curriculum/assessment challenge which had to be solved. The solutions included reducing content, testing, as well as, giving teaching input on the day the whole class was present and ensuring that the quality of learning was not compromised.

A combination of two learning pedagogies; blended learning and scaffolding were identified as the theories to drive the curriculum model that would be able to meet the challenges posed by the new tutorial structure. The Centre for Educational Development (CED) was also sought to provide the technological solution to integrate the blended curriculum. This solution came in the form of a prototype site created to manage the different blends of the course (Figure 1).

The name given to the curriculum model is the Spring-Cycle Blended Curriculum (SCBC) Model. The remaining proposal will discuss the main features of the SCBC Model and how it was applied to the development of the writing curriculum of HW001. The proposal will also briefly discuss the initial

outcomes of the pilot implementation of this model and its possible applications in other learning contexts.

Table 1: Sample of a 3-week cycle tutorial structure

Tutorial	Alpha Grp	Beta Grp	Topic	Notes
Cycle 1				
Wk 3 Tutorial 1 20 Aug	Workshop		The Building Blocks Of A Paragraph	Expressways:Chapter 3&4(relevant sections of ch 1&2) http://ablongman.com/mcwhorterexpressways1emywritinglab.com Assignment Paragraph Structure (15%)
Wk 4 Tutorial 2 27Aug	Face-to-Face	Online		Chapter 3&4(relevant sections of ch 1&2) http://ablongman.com/mcwhorterexpressways1emywritinglab.com
Wk 5 Tutorial 3 3 Sept	Online	Face-to-Face		Expressways:Chapter 3&4(relevant sections of ch 1&2) http://ablongman.com/mcwhorterexpressways1emywritinglab.com

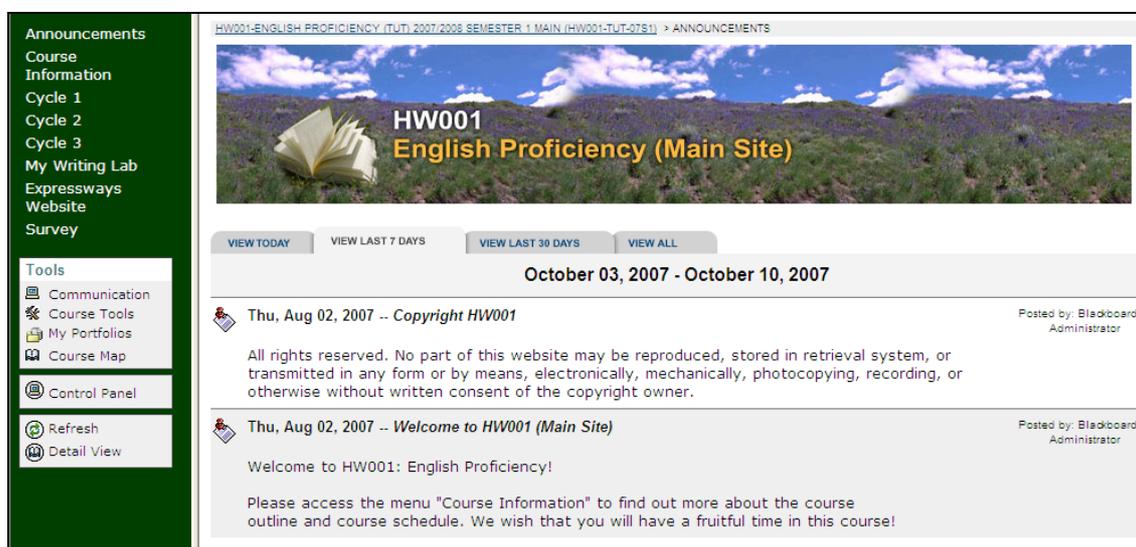


Figure 1: A screen shot of the prototype site

Literature review

The review of literature provides the pedagogical and theoretical background to support the SCBC Model.

Scaffolding

Scaffolding instruction is one of the teaching strategies which originates from Lev Vygotsky’s sociocultural theory and his concept of the zone of proximal development (ZPD). According to Vygotsky (1978) and Bodrova & Leong (1996), the zone of proximal development is defined as the space between the child’s current level of independent performance and the child’s potential level of independent performance.

Wood, Burner & Ross (1976), defined scaffolding as the types of assistances that make it possible for learners to function at higher level of their zone of proximal development. In teaching second languages, “scaffolding refers to providing contextual supports for meaning through the use of simplified language, teacher modeling, visual and graphics, cooperative learning and hands-on learning” (Ovando, Collier & Combs, 2003, p. 345). Scaffolding requires an expert to facilitate the learner’s transition from assisted to independent performance (Berk & Winsler, 1995). One key characteristic of scaffolding instruction is

fading, the gradual reduction of support by the expert for the learner as learner becomes more competent with academic tasks that are initially beyond their ability (Palinscar, 1998; Wood et al., 1976).

Features of the scaffolding framework incorporated into the SCBC Model

The following features of the scaffolding framework support the Spring-Cycle Blended Curriculum Model. According to

1. Teo & Gay (2004a; 2005a; 2005b), individualised or personalised support is one of the important elements which should be made available for any online learning environment. Scaffolding has been noted to provide such individualised support based on the learner's ZPD (Chang, Sung & Chen, 2002).
2. Teo, Chang & Gay (2006), one of the essential learning methods for online learning is prior knowledge activation. In addition, according to Van Der Stuyf (2002), "scaffolds facilitate a student's ability to build on prior knowledge and internalize new information".
3. Teo, Chang & Gay, (2006), fading can mimic the face-to-face interactivity between the teacher and student. The teacher in a face-to-face learning environment can select the suitable fading mechanism for guiding different learners to complete complex reasoning tasks. In an online learning environment, where teacher-learner interactivity is absent, it is important to incorporate fading mechanism as part of the learning design.

Blended learning

Graham (2005) defines blended learning as a combination of face-to-face instruction with computer mediated instruction. Graham, Allen and Ure (2003) noted that blended learning is preferred based on the following 3 reasons: (1) improved pedagogy, (2) increased access or flexibility, and (3) increased cost effectiveness (Chen & Looi, 2007). In addition, blended learning also enables the instructor to reach out to audience globally in a short period of time with consistent and semi-personalised content delivery (Bersin & Associates, 2003). Blended learning can be considered to combine "the best of both worlds" but much depends on how well it is designed (Graham, 2005).

The Spring-Cycle Blended Curriculum (SCBC) model

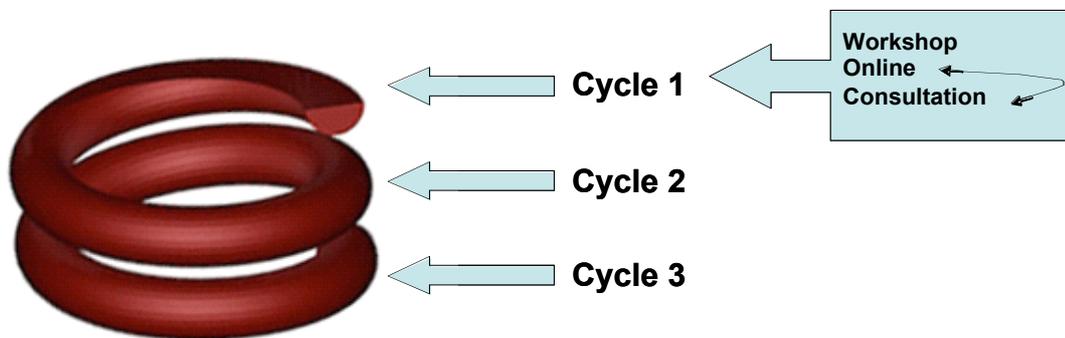


Figure 2: The Spring-Cycle Blended Curriculum (SCBC) model

Description and application of SCBC model to HW001 curriculum

The "Spring" and "Cycle" metaphors

The metaphors of the "spring" and the "cycle" in the Spring-Cycle Blended Curriculum (SCBC) Model represent the teaching strategies adopted in the model (Figure 2). Each cycle of the spring represents a cycle of reinforcement activities that scaffold learning. The activities are designed to facilitate the learners's transition from assisted to independent performance (Berk & Winsler, 1995; Meyer, 1993). The scaffolded activities in addition are blended to combine the best of the worlds of face-to-face and online activities (Graham, 2005).

The “spring” in addition to reinforcing and deepening learning within a cycle can also support the learner when new knowledge is added in a new cycle of the spring. The uniqueness of SCBC Model is its ability to deepen as well as stretch learning as learners develop toward independent performance.

Application of SCBC model to the HW001 curriculum

A typical Cycle in HW001 comprises 3 modes of teaching which achieve different outcomes. The first mode called the “workshop” is a face-to-face mode of the blend. It is used to introduce new concepts. The basic building blocks of a paragraph are introduced in the first Cycle on paragraph writing.

The other two modes in this Cycle are the face-to-face consultation and the online modes. The activities selected in the online mode cover the same content taught in the workshop session. The activities include a clip that reviews concepts taught earlier and recall and apply graded activities that test understanding. Learners can redo exercises until they improve their scores. They can print out errors and clarify their understanding as well. The consultation mode built into the Cycle provides additional social support for personalised learning. It provides a platform for the expert to ‘diagnose the complex needs of students at various stages of the intended learning and to employ proper instructional strategies adaptively to their progress’ (Tabak, 2004).

Other features of the SCBC model

Assessment of writing in this model is conducted at the end of the teaching input session in the workshops (T1) of each cycle. This together with the error reports from online activities provide targeted information on the progress of the learner. This helps promote individualized support during the consultation mode based on the learner’s ZPD (Chang, Sung & Chen, 2001).

Each new Cycle introduces new knowledge in the form of a new paragraph pattern which builds on the basic paragraph structure introduced in Cycle 1.

Learners begin with clear instructional goals and can measure development through test outcomes and online scores. This helps the learners become ‘more motivated and invest in the learning progress’ when they can dictate and plan his learning route’ (Teo, Chang & Gay, 2006).

This model also reflects features of the instructional design approach proposed by Teo, Chang and Gay (2006). Scaffolding of curricular materials in this model also fades ‘systematically based on the diagnosis of student progress.’

Trial implementation of SCBC model

A simplified version of the SCBC Model was trialed in January 2007 before its full-scale launch in August 2007. The informal findings of the trial on 15 students showed that students preferred the blended approach to the complete face-to-face approach. They found each blend to have its own strengths, improved their writing skills. In addition, students enjoyed the new HW001 curriculum.

A more formal study will be conducted after the full-scale implementation of the model and the findings will be published, as well as, used to enhance the model.

Conclusion

The “cycle” in this model sets the limits for learning to deepen through reinforcement while the “spring” facilitates new learning through stretching by holding intact what was previously learnt.

This model can be reused for new curriculum or modified and applied to other subject areas and contexts. The number of tutorials per cycle can be adjusted to set the limit for reinforcement and mastery of new concepts. The cycle could be extended or shortened accordingly. The model can also be used with online and consultation modes only or with any other combination that will prove effective for learners in their respective subject areas.

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