[Website Review]

CBeebies

Ai-Chia Chang (aichiachia@gmail.com) Washington State University, USA

Title	CBeebies (http://www.bbc.co.uk/cbeebies/)
Publisher	BBC Online Services
Type of product	Children's learning website
Target Users	Preschoolers and parents; young learners of English as a second
	language
Access to Content	Free access to the contents produced by the BBC;
	Content created by third parties is not available outside of UK

Overview

The traditional definition of literacy is the ability to read and write (Cummins, Brown & Sayers, 2007). However, with the emergence of new technologies, the definition of literacy has been expanded beyond the traditional meaning. There are additional socially accepted forms of communication, including images, sound and/or body language. People, therefore, should be able to move toward more complex ways of thinking and processing information in order to communicate meaningful ideas and concepts to others who belong to the same community. This echoes Lankshear and Knobel's (2007) new literacies argument that "being literate means being able to use the 'right' language in the 'right' ways within a discourse" (p. 18). Based on this definition, new literacies and technology skills should be taught to help learners respond appropriately to authentic audiences and texts (Coiro, 2003).

Technology plays an especially important role in children's literacy learning because it supports: (1) providing young learners with a variety of learning resources (Bergin, Ford & Hess, 1993; Bullards, 2009); (2) teaching cognitive flexibility through collaboration and interaction; and (3) accessing achievement in education and the global marketplace (Coiro, 2003; Cummins, Brown & Sayers, 2007). First, the wide range of online learning contexts provides young learners with both language and content learning (Bullard, 2009; Egbert, 2005). Young learners are not only receivers but generators of meanings and solutions to problems during the learning process. Many researchers suggest that learners could learn more through their own discoveries by using technology (e.g., Cummins, Brown & Sayers, 2007; Egbert, 2009). Second, young learners start learning by listening, touching and observing (Byrnes & Wasik, 2009). With technology assistance, young learners can explore the unknown by listening, developing technological skills, and observing images on the internet. In addition, technology can be used as a medium to create opportunities for collaboration and social interaction for these learners (Bullard, 2009; Parette, Hourcade & Heiple, 2000). Discussion and interaction can enhance children's cognitive flexibility to improve their language and text/image comprehension (Cartwright, 2008). Computer use provides consistent and frequent reinforcement to increase young learners' on-task time (Bergin, Ford & Hess, 1993). Young learners can participate in scaffolding simulating tasks that might not be provided in home learning environment. This helps enhance their cognitive development and meaning making in the process (Bullard, 2009). Third, technology is used in daily both outside of and within school settings. Exposure to technological innovations is fundamental to success. As Druin (2002) states, children are not just users but testers and designers of technology projects. This idea can be expanded to the possibility that technology use might help adults understand what their child needs, wants and is interested in learning. For example, young learners might spend more time playing games or watching videos. With this understanding, adults might know better how to engage young learners to achieve more (e.g., Egbert & Ernst-Slavit, 2010; Meltzer & Hamman, 2004).

Cummins, Brown and Sayers (2007) propose instructional components that conform to the definition of literacy mentioned previously. Because it is essential to carefully evaluate technologies to ensure that they support literacy learning, these instructional components will be used as criteria for evaluating the CBeebies website. The criteria are: (1) providing cognitive challenge and opportunities for deep processing of meaning; (2) relating instruction to prior knowledge and experiences; (3) taking active control over the learning process; (4) promoting extensive engagement of the four language skills – listening, speaking, reading, and writing; (5) developing strategies for effective reading, writing, and learning; and (6) encouraging parental involvement. These principles reflect the importance of effective technology use for young learners. This review will first describe the general design of the website and then analyze the website based on the criteria.

Design of CBeebies

The purpose of the site is to educate pre-K children. Since all of the content is in English, English as a foreign language (EFL) children can use this website to improve their language and technological skills. There are five main sections on the website: Play Games, Song Time, Make & Colour, Story Time, and Watch & Listen (see Figure 1). CBeebies provides voiceover for these five choices to help young learners comprehend the icons. A weakness is that this page embeds three other sections on the right side: (1) CBeebies Shows, (2) Meet the Presenters, and (3) CBeebies on iPlayer. They are designed to involve parents/adults in children's learning. However, learners need to know how to go back to CBeebies so that if they click any one of the adults' links they won't get "lost".



Figure 1. CBeebies homepage.

In each of the five sections, the content is categorized in four ways: Our Picks, Show, Theme and alphabetical order. Users can select the content from these different choices (see Figure 2 for an example). In each category sorted by theme, there are different topics. Learners who do not read yet may require adult instruction to explain the topics.



Figure 2. Four topics in Song Time.

Accessibility issues

The more access to learning resources that is given, the more opportunities are provided for young learners to take control and ownership in the learning process (Egbert, 2009). Accessibility to the contents on CBeebies is a problem – not all of the content is produced by the BBC; third parties own the rights to some of the contents. These contents are not available to users who are not in the United Kingdom (UK). Moreover, there is not made clear until users see the label "Not Available in Your Area" after clicking an icon. This might be unclear to young learners while they are learning as well as inconvenient to adults. Adults need to click and check what is accessible to their child. CBeebies could improve this problem by providing a table of contents to help adults outside of the UK find access to the available contents.

Evaluation of CBeebies

This evaluation of CBeebies is based on the principles proposed by Cummins, Brow & Sayers (2007) to provide perspectives on the strengths and weaknesses of the site.

1. Providing cognitive challenge and opportunities for deep processing of meaning

Merely clicking a mouse is not sufficient to enhance learning. However, if children can recognize how clicking leads them to a learning section of the site, the meaning of a quick click is much more than a simple finger exercise (Chapelle, 2005). Take "Play Games" for example. CBeebies provides learners with the opportunity to transfer knowledge from one context to another (see Figure 3 for an example of an activity). In this section, learners will listen to a question orally and then click on the icon at the bottom of the page that matches with the illustration in the middle. Learners must understand what the question is first and then process the meaning of the images at the bottom to choose the right answer. The use of

visual imagery and symbols with listening comprehension aids in young learners computer skills, cognitive development and meaning making (Bullar, 2009; Tall, 2000). CBeebies provides children with basic but not very challenging learning opportunities in this way.



Figure 3. An activity in Play Games.

2. Relating instruction to prior knowledge and experiences

Lee (2007) argues that bringing students' cultural backgrounds and experiences into the learning process enhances learners' cognitive development and language skills. The contents of CBeebies accomplish this somewhat. For example, learners have probably seen or known about potatoes. When they watch the video "Small Potatoes" they can recognize different sizes of potatoes and color the worksheet "Small Potatoes". Other content and activities on CBeebies are also related to children's prior knowledge and experiences, such as objects in a house and holidays. Therefore the site meets this criterion.

3. Taking active control over the learning process

According to Cummins, Brown and Sayers (2007) and Donovan and Bransford (2005) empowering learners to take control of their own learning enhances learners' understanding of the content more deeply than learning it passively. After learning to click the mouse, learners need to comprehend the icons' meanings, allowing them to pause or replay the video. Once learners have these skills, they can actively control the learning process. Many studies show positive results in young learners' learning outcomes when they learn independently and with on-task behavior (e.g., Bullard, 2009; Hanson-Smith & Rilling, 2007). Computers provide opportunities with more skill development in tasks than text-based learning.

4. Promoting extensive engagement of the four language skills

Children usually start learning the world from listening and visual inputs (Dickinson & Tabors, 2001). On CBeebies, learners can watch and listen to videos to improve their listening, visual, and pragmatic comprehension. In terms of speaking, learners can sing songs while watching videos. They also can work with adults to ask questions or retell what they have learned. This helps learners speak and express themselves. EFL learners can also improve their listening

comprehension and oral skills in these ways. Technology provides young learners with independent and collaborative learning with variety of learning content to improve language skills (Hanson-Smith & Rilling, 2007). Although there is little reading or writing, CBeebies provides beginning practice in the four skills of language effectively.

5. Developing strategies for effective reading, writing, and learning

Developing strategies for effective reading and writing is probably the weakest element of this site. There are no hyperlinks between related individual exercises that could lead to more indepth thinking and learning. For example, the title "Small Potatoes" can be found in "Song Time" and "Make & Colour". No connection to the topic in the other section is available when learning it in either. If there were a hyperlink to connect these two sections, users could integrate the ideas more efficiently. Otherwise, the development of strategies for reading, writing and other learning are weakened.

6. Encouraging parental involvement

Many studies show that parental involvement is highly associated with student academic achievement (e.g., Cummins, Brown & Sayers, 2007). With parental involvement, learners can have the opportunity to ask questions about website content. The interaction between adults and children can help preschoolers develop their communication, comprehension and cognitive skills. In addition, because instant response to children's questions is crucial (e.g., Egbert, 2009), parents can provide just-in-time learning. This helps children not only learn the messages from the content but also from the parent's inquiry or further explanations.

To support adult and child interaction, CBeebies provides "Grown-ups Information". Through this content adults can learn pedagogical strategies and understand the theory behind how and why an activity enhances a child's cognitive development. The information provided in "Grown-ups Information" is printable and downloadable, which is very convenient for adults who don't always have Internet access. With deeper understanding of the site's instruction, adults will know better how to help children learn on CBeebies.

Conclusion

CBeebies has a number of strengths and weaknesses. The strengths lie in the potential to develop learners' cognition, connecting to learners' prior knowledge and experiences, learner control, and parental involvement to enhance young learners' literacy and technical skills. Weaknesses include that CBeebies does not develop strategies for effective reading and writing; it lacks hyperlinks that could be helpful for users to make connections between related learning contents. Pronunciation is another concern. Some EFL learners are used to American English pronunciation. The British pronunciation as presented on CBeebies may impede some EFL learners' listening comprehension. CBeebies could work to help learners understand the benefits of learning different pronunciations. The last weakness is accessibility. CBeebies can consider these two solutions to improve their service: (1) a list of available contents for all users, and (2) options for purchase on a customer service or contact page. Overall, CBeebies is a learning website of quality for preschoolers and EFL learners.

Note: All screenshots are presented with permission.

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