

# **Integrating Google Blogs into the K-6 Language Arts Classroom To Promote Interactive Learning Communities**

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**Abstract:** Educators must integrate technology into their curriculum with the introduction of State Common Core Standards nationwide in grades K-12. The new standard emphasizes the use of technology including the Internet to produce writing products. Bringing literacies into a classroom is not an easy task for a teacher, especially when two-thirds of teachers feel underprepared to use technology in the classroom (Barone & Wright, 2008). This online instructional module was designed to introduce K-6 educators to using Google Blogs (Blogger) in the classroom to promote interactive learning communities. Google Blogs was selected because of its enormous user base, ease of use, free access, and privacy features. Graduate students and educators voluntarily participated in this web-based module by taking pre- and post-assessments, and attitudinal surveys. The module engaged participants using short quizzes, videos, and images. The results indicate that after the module, participants felt more comfortable integrating an online tool such as Google Blogs into their classroom to promote interactive learning communities. Most found the demonstration video to be helpful in their learning and agree that blogging could enhance interactive learning in the classroom.

## **Introduction**

Social media has become a familiar tool to this generation of students. They “tweet”, Facebook, Instagram, and blog. For teachers, keeping up with social media and implementing it in the classroom can be an essential tool to motivate their students learning. By combining writing with online technology, teachers can provide opportunities for students and future educators to develop their digital fluency while also strengthening their traditional literacy skills (Witte, 2007).

The Internet is this generations’ defining technology for literacy (Zawilinski, 2009). These new literacies extend traditional literacy experiences with comprehension of information on the Internet; effective use of search engines to locate information; evaluation of Internet sources; communication using e-mails, texts, and chats; and the use of word processing programs (International Society for Technology in Education, 2007). It allows children to make use of prior knowledge useful for understanding and producing text (Nolen, 2007). Children are intrinsically motivated to use computers, as evidenced

by the fact that they spent longer time and have more focused sessions at the computer compared with non-computer-related activities (Couse & Chen, 2010). The purpose of this instructional design project is to develop and evaluate a web-based instructional module for K-6 educators on how to integrate classroom blogs into K-6 language arts classrooms to promote interactive learning communities at the elementary school level.

## **Background**

Some believe we just need to place a computer in the hands of our students, and they will learn what they need (Negroponte, 2006). One survey reported that some 12 million adolescents aged 12-17 maintain their own blogs in the United States (Lenhart & Madden, 2005). Educators need to guide students on how to use these tools effectively and efficiently in the classroom. Howard Reingold (2006) summed it up well by describing our students this way:

This population is both self-guided and in need of guidance, and although a willingness to learn new media by point-and-click exploration might come naturally to today's student cohort, there's nothing innate about knowing how to apply their skills...(n.p.)

A blog does not just develop online communication skills. Instead, online communication has become an essential aspect of online reading comprehension (Castek et al., 2007). On the Internet, writing is intrinsically integrated with reading comprehension process (Castek et al., 2007; Leu et al., 2007). These essential new literacies of online reading comprehension emphasize higher order thinking skills like analysis, synthesis and evaluation (Anderson, 2005; Bloom, 1995; Coiro & Dobler, 2007) and can be practiced through blogging.

Blogging helps students improve their writing skills with the promise of an authentic audience. Other attributes of blogs such as *easy-to-publish* and *easy-to-access* are more likely to increase the likelihood of accommodating younger students' needs in that today's generation of students are easily dissatisfied with a system requesting too many steps to obtain online information (Kim, 2007). Children who use computers have been found to show greater gains in intelligence, structural knowledge, problem solving, and language skills compared with those who do not use technology in their learning (Couse & Chen, 2010).

Note however, that it is not technology alone that renews learning (Seufert, Lechner, & Stanoevska, 2002). Nipper (1989) a relatively early writer on online learning discusses the need to create a sense of "synchronous presence" and reduce the social distance between all participants. Students need to be able to direct their own learning, work with and listen to others, and develop ways of dealing with complex issues and problems that require different kinds of expertise (Bielaczyc, & Collins, 1999).

## Methodology

The participants of this module were solicited via email that was sent to email listservs at the Department of Educational Technology at the University of Hawaii at Manoa.

Eighteen participants volunteered anonymously and participated in the pre-test survey; only thirteen completed the entire module. The sample consists of fifteen females and three males, with most ranging from 22 to 34 years of age. Of the 18 that participated in the pre-test survey, thirteen were classroom educators and five were not. The module focused on four main points: Blogs, Learning Communities, State Common Core Standards and Implementing Google Blogs into the classroom.

The demographic survey consisted of five multiple-choice questions, and five Likert scale questions (see Table 2).

All participants in this research project were emailed a link to an online instructional module, created and hosted by Weebly.com with embedded Google Doc forms, and Google Blogs (Blogger) was used as the tool for the online video tutorial embedded into the Weebly website. Weebly.com was selected to develop the module because it is free, easy to navigate and allowed the researcher design flexibility. It allowed the researcher to embed pre- and post-test using Google Docs, which automatically stores participants' answers into a Google spreadsheet.

Using the Dick, Carey, and Carey (2009) instructional design model, the researcher created four main objectives for the online module along with a hierarchy chart. The learning objectives created were used in the online module to give participants an organized learning module with a focused instructional goal. With majority of participants being graduate students and educators, making the module organized and relevant resulted in positive feedback for the flow of the module.

Gagne's Nine Events of Instruction (Condition of Learning) was used to create the basic format of the instructional module. Gagne's conditions of learning utilize prior knowledge to acquire new knowledge and are based on his theory of behaviorism and cognitive. A self-directed pace as the learner manages cognitive activities provides an opportunity for the learner to scaffold prior knowledge and acquire new knowledge through application (Dick, Carey, and Carey, 2009). Table 1 below illustrates how each step was implemented.

**Table 1.** Gagne's Nine Events

Step	Technique
<b>1) Gaining Attention</b> (Reception)	The home page introduces the module creator and module purposes to explain the intent of this online web-based instructional module. Navigation buttons located at the bottom of each module page are used to grab the attention of the

	learner and to provide direction throughout the instructional unit.
<b>2) Informing Learners of the Objective (Expectancy)</b>	The module home page introduces the (four) module objectives and sets learner objectives for each module page (lesson event).
<b>3) Stimulating Recall of Prior Learning (Retrieval)</b>	A video, text, or screencast at the end of each module learner objectives are summarized.
<b>4) Presenting the Stimulus (Selective Perception)</b>	URL providers, images, text, and videos, with examples are used to present the information to the learners.
<b>5) Providing Learning Guidance (Semantic Encoding)</b>	URL providers, images, text, and videos, with examples are used to present instructions to the guide learner.
<b>6) Eliciting Performance (Responding)</b>	A short formative assessment at the end of each module elicits performance from the learner and is a motivational tool to proceed to the next lesson event.
<b>7) Providing Feedback (Reinforcement)</b>	After completing the post-assessment, learners can click on the navigation button located at the bottom of the assessment to check their answers.
<b>8) Assessing Performance (Retrieval)</b>	A post-assessment is given at the end of the online web-based module that covers all four-module lesson learner objectives.
<b>9) Enhancing Retention and Transfer (Generalization)</b>	In the last module learners can watch a short screencast video to show how to create a classroom blog and implement in the classroom.

An elementary curriculum coordinator acted as a subject matter expert and an elementary educator gave detailed one-to-one feedback. Most suggestions were implemented into the module.

## Results

### *Survey Results*

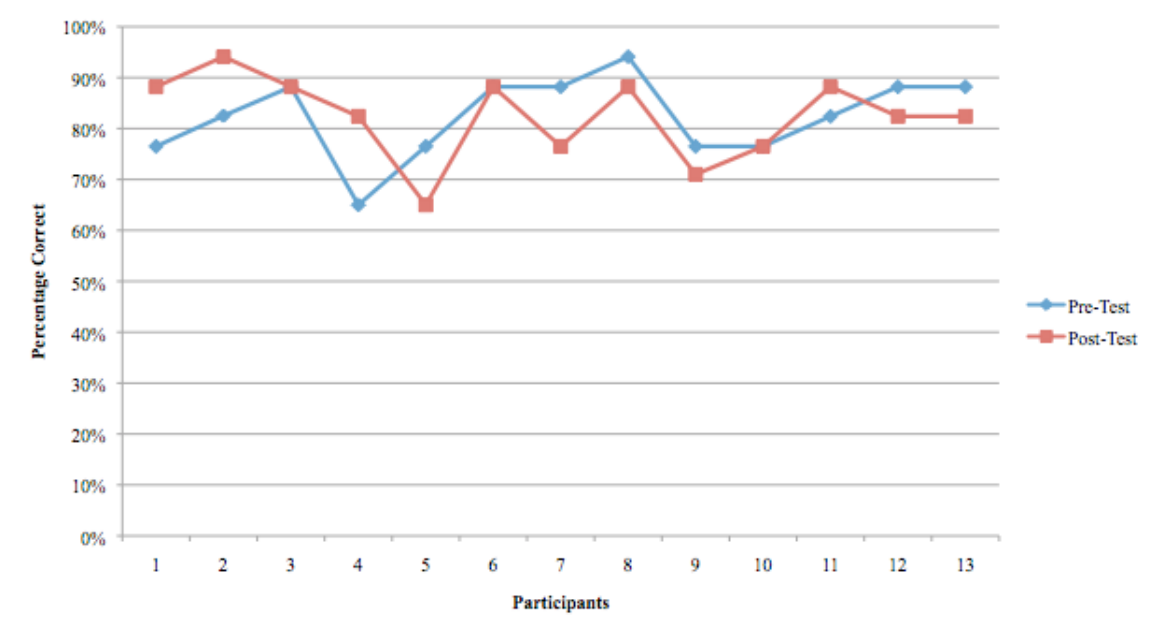
Online surveys collected data on demographics, educator experience, experience with blogs, and attitude toward technology in the classroom. Table 2 summarizes the demographic information. Only a small percentage (32%) of participants are currently using a classroom blog in their classroom and only 26% feel comfortable integrating blogs into their classroom. One-third participants were familiar with blogs and are using them in their classroom. They are also likely to integrate them into their classroom.

**Table 2.** Demographics

Demographics
79% of participants were female and 68% are classroom teachers
21% were very familiar with State Common Core Standards
5% were very familiar with learning communities in the classroom
16% were very familiar with Google Blogs (Blogger), Edublogs, KidBlogs, or Wordpress
42% feel very comfortable integrating technology into their classroom
26% are likely to integrate a tool like Google Blogs into their classroom
32% already use a blog site in their classroom

One of the demographic questions was an open-ended response, which asked participants their opinion about integrating blogs into the classroom. One participant said, *“I’ve heard great things about using blogs in the classroom but I have never tried them.”* Another said, *“I think blogging would be a great way to get students to write more. In the process, they will also practice their thinking and communication skills.”* These comments verify that educators agree that implementing blogs into the elementary classroom can motivate student learning.

Overall, the module was well received, as one participant said, *“Based on this module. I feel more confident in my understanding of what a blogs is.”* Participants varied in their results in their pre- and post-test. Participants averaged 83% on the pre- and post-test results. Scores improved slightly for a few participants and decreased slightly for others. Figure 1 shows participants pre-and post-assessment score comparison. They answered some questions correctly in the pre-test and incorrectly in the post-test. One participant asked, *“Could the pre-test questions be honed more specifically according to learning objectives and pared down in number?”* This led the researcher to believe the module may need to be improved, or reword its instructional content to be more precise and to the point to avoid confusion on post-test answers.



**Figure 1.** Comparison of pre- and post-test percent correct by participant

## Discussion

Overall results confirmed that with a well-designed online module with interactive features and relevant content to the participants is well received and useful for the K-6 classroom educator. However, more research needs to be conducted that incorporates the intended target audience and institution, and a sample of intended student population.

To take advantage of the potential of online learning communities, the appropriate medium has to be designed and the platform has to be built (Seufert, Lechner, & Stanoevska, 2002). The online module section on *learning communities* created methods and implementation guidelines for educators to consider when integrating social media such as blogs into their classroom. The methods to promote a learning community are illustrated in Figure 2.

### Elements of an online learning community are:

#### 1) A sense of shared purpose

Create a blog for each one of your students

- to create their own space to document and reflect on their own learning
- receive comments from you, classmates or blog-posts around the world

#### 2) Establishment of boundaries defining who is a member and who is not

Have one classroom blog

- one username and password for all students
- students sign their comment with their first name or avatar name
- give each student their own username and password as "Subscribers" to post comments on your posts
- give each student their own username and password as "Contributors" to add posts that will need to be approved by you

#### 3) Establishment and enforcement of rules/policies regarding community behaviors

Online syllabus

- a clear and easily accessible syllabus with clear expectations
- consent forms from parents if students are underage

#### 4) Interaction among members

- Keep the idea of collaboration in the forefront of your mind at all times.
- Build elements into every activity so that kids learn that sharing ideas and knowledge is part of the normal routine. Applications include everything from posting samples for a project you are about to start to doing group shares when you are finished.

#### 5) A level of trust, respect and support among community members



Photo Credit: <http://www.i-specify.com>

**Figure 2.** Elements of an online learning community

Quantitative and qualitative data were used from the pre- and post-test and the attitudinal survey to measure the effectiveness of the instructional module. The attitudinal survey consisted of ten Likert scale questions and three open-ended responses. Participants' views are summarized in Table 3. In general, participants did not have problems navigating through the module. Most participants felt the module was clear and easy to understand, and at the right level of difficulty for them. Although participants responded well to the module, the content of the module and embedded pre- and post-test needs to be modified to improve participants' scores on the post-test.

**Table 3.** Attitudinal Survey Results

Attitudinal Survey Questions	Average
1. The module was clear and easy to understand.	4.3
2. The level of difficulty was about right for me.	4.3
3. The length of the module was about right for me.	4.6
4. The examples in the module were helpful.	4.2
5. I learned a lot about creating learning communities using classroom blogs.	4.1
6. The module will help me to integrate classroom blogs into a primary education classroom.	3.9
7. The module motivates me to learn more about blogs and other social media tools to use for educational purposes.	4.0
8. The module flowed in a logical manner.	4.6
9. The module was useful to me.	4.1
10. I did well on the quizzes because I worked through the module.	3.7

Note: The Likert scale ranged from 1 to 5, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

The majority of participants enjoyed the module, as one said, *“This module was easy to understand and follow, the navigation flowed logically, and the standards explanation was interesting and useful.”* It addressed Gagne’s Nine Events of Instruction components of *gaining attention, informing the learners, stimulating recall, presenting the stimulus, providing learning guidance, eliciting performance, providing feedback, assessing performance, and enhancing retention and transfer.* One participant did mention, *“In number ten you asked if ‘I did well on the quizzes’ –I didn’t get feedback on whether I got the correct answer. It would be helpful to provide an answer key for the embedded quizzes at the end of each page.”* Future modifications of the module may include more interactivity as one participant commented on in the open-ended responses. For example, participants must create their own classroom blog based on the video tutorial embedded in the instructional module.

The sample audience did not accurately represent the target audience due to access issues to public school teachers. This explains participants’ low scores to the pre-test questions on Common Core Standards and learning communities. Although the instructional module was developed to be equal to the same amount of time as a core subject block, some participants noted that the module seemed too long.

For a more accurate determination of design and implementation of integrating blogs into the classroom, further studies are needed. The researcher recommends an action research in the targeted institution using the targeted population. Implementing blogs into the classroom for an entire semester would be adequate time to determine the intended instructional goals. Collecting student work samples and attitudinal surveys will better determine the results of integrating blogs into the elementary classroom to promote interactive learning communities.

## **Conclusion**

An online instructional module was designed by the researcher about how to integrate Google Blogs into the language arts classroom to create interactive learning communities and was discussed in this paper. The purpose of this module was to provide a resource and guide for educators, who desire to promote and create more interactive learning communities through the use of social media tools, such as blogs. Google Blogs was selected because of the enormous user base, ease of use, cost, and privacy features to protect students’ work.

Since the implementation of this module, the researcher is now aware of participant’s interest in integrating social media into their classroom; the implementation of this online module for educational purposes was validated as a possibility. It was clear in this study that social media such as blogs could be an option for K-6 educators to promote interactive learning communities in their classroom.

Blogs seem to be a viable tool for educators to integrate into their K-6 elementary classroom. It provides educators with another tool to implement technology standards and curriculum to prepare students to become digital citizens who are technologically literate



(Couse & Chen, 2010). As the expectations of State Common Core Standards are implemented into elementary classrooms, the use of social media tools such as blogs warrants further research to more fully understand the potential of this technology to enhance student's learning.

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