

Bringing Digital Literacy into the ESL Classroom: Enhancing Language Learning Tasks Using Web 2.0 Tools

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Abstract

This paper explains the importance of digital literacy and how digital literacy skills can be utilized by ESL teachers for English language lessons. Using a set of sample ESL learning tasks, the paper illustrates how Web 2.0 tools can facilitate digital literacy and language skills of our learners. Three sample tasks are used to demonstrate that teachers can aim to teach communication, collaboration, critical thinking and creativity competencies (the 4 Cs) by utilizing the participatory environments and microcontent creation features offered by Web 2.0 tools. The paper concludes with a set of implications that weaving digital tasks into ESL classroom instruction can help overcome constraints of print-based tasks, promote optimal conditions of language learning, and foster newer literacy skills to make both language and digital literacy teaching relevant for the 21st century learner.

Keywords: Web 2.0 tools, digital literacy, 4 Cs, 21st century skills

Introduction

One of the primary goals of formal schooling is to develop literacy skills, viz. reading, writing, numeracy, reasoning, etc. in learners. Significant for us as teachers is the fact that literacy is not a static construct; it is deictic in nature (Leu, 2000). The nature of literacy keeps evolving depending on societal contexts and the demands of literacy tools. With an increasing and overarching presence of information and communication technology (ICT) in our daily lives, to be literate now also means having

the ability to meet the newer demands of and wider possibilities offered by technology and perform literacy skills using technology tools. To put simply, this is digital literacy¹.

Web 2.0 and Digital Literacy Skills

The advent of Web 2.0 tools has necessitated the extension of literacy parameters. Second generation or version 2 of the internet, called Web 2.0 not just provides its users access to a large amount of multimodal sources information, it also allows them to interact with potentially anybody in the world, create content, and share information. Two significant features of Web 2.0 are their participatory environments and microcontent creation supported by a wide array of easy-to-use tools for communication, collaboration, creation and sharing of information. Reading and writing when mediated through Web 2.0 tools (for example, social media sites like Facebook, social bookmarking tools like Diigo, blogging tools like WordPress, collaboratively developed sites like Wikipedia, etc.) become more multifaceted and social in nature than when transacted through conventional literacy tools like paper and pen.

Clearly, knowing how to operate technology, or read and write in English using technology are not enough to make one literate in the 21st century. Adopting a granular approach to highlight the various skills required to work successfully with Web 2.0 tools, the National Council of Teachers of English (2013, p.1) lists the components of literacy in the 21st century as the ability to:

1. demonstrate proficient use of technology tools
2. manage, analyse, and synthesise multiple streams of simultaneous information
3. create, critique, analyse, and evaluate multimedia texts
4. communicate with a global audience
5. solve problems collaboratively
6. strengthen independent thought through interaction
7. design and share information for global communities, and
8. attend to the ethical responsibilities required by these complex environments.

Termed 21st century skills, this list of literacy skills provides a clear detailing of the interactive nature of technology, cognitive and

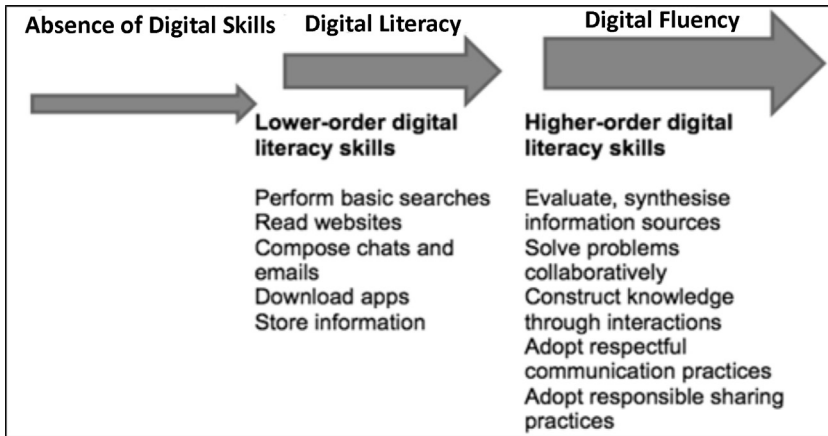
communicative competencies required to consume, create and share digital content.

To support formal literacy instruction practices and align them with 21st century student needs, the National Education Association (NEA, 2012) identifies four core skills that educators need to focus on to equip students with 21st century digital literacy skills. Termed the 4 Cs of 21st century learning,² the NEA recommends that communication, collaboration, critical thinking and creativity skills be taught in classrooms to ensure students' success in their daily, academic and workplace activities. The 4 Cs are not new skills nor are they exclusive to working with ICT tools. However, their relevance to 21st century literacy is that they are inevitable for efficient use of Web 2.0 tools; features of Web 2.0 tools like faster communication, wider collaboration, availability of a substantial amount of information, potential to communicate or access information anytime, anywhere, etc. make the skills of communication, collaboration, critical thinking and creativity indispensable while using Web 2.0 tools.

Teaching Digital Literacy

Most of our students, depending on their levels of home literacy practices and access to technology tools at home, are digitally literate; part of their everyday reading and writing are digitally-mediated. However, students demonstrate varying levels of expertise across the different digital literacy skills. For instance, some might have exceptional search skills but may not be capable of judging the reliability of sources of information, while some might be able to effortlessly design digital posters but not be aware of modifying their message to match the audience's needs. It is therefore that digital literacy is considered a continuum – starting with the novice abilities of knowing how to use technology tools to perform basic reading and writing, moving to expert literacy skills that help one perform activities like analysing and synthesising information and constructing new knowledge (Spires, Paul and Kerkhoff, 2017). Expertise in digital literacy, called digital fluency is what helps users move from an understanding of how to use technology tools to creating using these tools (Sparrow, 2018). The stages of development of digital literacy are shown in Figure below:

Figure: Development of Digital Fluency



The 4 Cs are integral to the development of students’ digital fluency skills. They provide a framework for teachers to design activities to help students move from lower-order digital literacy skills to more meaningful use of technology tools that equip students to perform cognitively challenging activities and create new content(Lankshear and Knobel, 2015). It is activities like these that empower students with the skills they need to become socially responsible and engaged global citizens (OECD, 2018).

Integrating Digital Literacy in the ESL Classroom

Since communication, collaboration, critical thinking and creativity competencies are language-mediated, and in digital settings take place most of the time in English,we believe that the 4 Cs can be best developed by the English teacher. Educationists and researchers agree that the 4 Cs when delivered through digital tools can help build students’ language proficiency (Halvorsen, 2018). Faced with limitations vis-à-vis teacher readiness for task-creation, syllabus requisites, and classroom time constraints, we suggest that Web 2.0 tools can be used to augment and enhance print-based learning tasks available in prescribed textbooks. Three language learning tasks are presented to illustrate how Web 2.0 tools can be used to provide students opportunities for social interaction and shared construction of knowledge and thereby improve ESL proficiency. These tasks also indicate how delivery of the 4 Cs through Web 2.0 tools affords the leverage to promote optimal conditions of language learning and nurture current and relevant literacy practices in

ESL classrooms.

Choosing Web 2.0 Tools to Deliver Language Tasks

It is important to bear in mind that most Web 2.0 tools were not created for teaching or learning purposes. Therefore, before using them in the classroom, it is important to analyse their potential for delivering specific language learning goals. Tasks delivered through Web 2.0 tools, which are neither linked to course objectives nor have a clear learning purpose can frustrate and demotivate students and result in no learning gains (Johnson, 2013). On the other hand, web tools when used based on their pedagogical value can enhance the learning task and bring value-addition to the learning environment, thus distinguishing their use from learning settings that employ these tools to merely create enthusiasm or ensure motivation of learners.

Pedagogical Affordances of Web 2.0 Tools

The concept of pedagogical affordances helps us evaluate digital technologies based on their ability to support learning. According to McLoughlin and Lee (2007), affordances mean actions that an individual can potentially perform using the functions of a particular tool. As teachers, we should be able to determine the educational applications of a technology tool by identifying functions of the tool that can best meet specific teaching-learning goals. Pedagogical affordances of a technology tool can be identified by deciding how a specific learning objective can be met if instructional activities are transacted through its functions.

For example, Facebook allows one to perform the functions of expressing one's opinion and posting a related image by typing and uploading pictures. These functions enable the affordances of sharing ideas with others, using images to illustrate one's views and building meaningful interaction with one's friends. However, the presence of a specific feature (or function) in a digital tool does not guarantee the pedagogical usefulness of a tool; recognizing the pedagogical value of a tool requires imagination and creativity (Burden and Atkinson, 2008) to understand how it can be used to facilitate optimal conditions for second language learning. Continuing with the example of Facebook, the language teacher can use the four functions—communication, collaboration, critical thinking and creativity skills—discussed above, to achieve a series of language learning outcomes like (i) develop students' ability to express

their ideas in writing; (ii) adopt self-correction practices to ensure accuracy of written and oral language; (iii) demonstrate respect and courteousness towards others through online written communication; (iv) employ multimedia resources to evaluate and support their views, etc.

Redesigning ESL Tasks Using Web 2.0 Tools

In this section we present three task development ideas to help ESL teachers understand how Web 2.0 tools can be used to adapt print-based language tasks and make them more meaningful for ESL learning.

Four steps involved in developing these tasks are:

- a. identifying task constraints in prescribed coursebooks,
- b. choosing Web 2.0 tools based on their pedagogic affordances to augment print-based tasks,
- c. ensuring development of communication, collaboration, critical thinking and creativity competencies, and
- d. describing enhanced teaching objectives.

The original task presented here is from Lesson 2, “Nelson Mandela: Long Walk to Freedom,” in *First Flight* (NCERT, 2007, pp. 16-28), the English coursebook for Class X. While the objective of the task is to develop speaking skills, it also provides opportunities for facilitating discussion. Not quite clear—merely describing more nuanced teaching objectives without specifying how they may be realized by achieving certain outcomes would not take a teacher very far and may not develop note making abilities in students. For ease of explanation, this task is presented in this paper as three components (or sub-tasks) based on the skill developed by each component. Each sub-task is presented in terms of (a) its original form and constraints, (b) its digital form that addresses constraints, (c) pedagogical affordances of Web 2.0 tool used to overcome the constraints, (d) enhanced learning outcomes achieved vis-à-vis digital literacy skills, and (e) enhanced ESL learning outcomes.

Task 1: Example for scaffolding classroom discussion with content and language inputs

Original Task

Discuss the following:

- Causes of poverty and means of overcoming it
- Discrimination based on gender, religion, class, etc.
- Constitutionally guaranteed human rights (p. 26)

Classroom Constraints: Most teachers find it difficult to carry out discussion activities in class as they are time-consuming. Other reasons cited include the absence of meaningful gains or inability to meet learning goals, for instance, students end up discussing non-topic related issues; it could be because they do not have enough topic knowledge and/or they do not have sufficient language proficiency; or they are shy to speak in front of their peers.

A pre-discussion activity on Padlet can overcome the constraints listed above. Padlet (www.padlet.com) is a tool that functions as a collaborative online noticeboard where students share online resources and post notes.

Redesigned Task

Step 1: Form five groups. Choose one of the following topics: Gender discrimination; Discrimination based on religion; Discrimination based on class; Poverty/ Discrimination of economically weaker sections of the society; or Violation of human rights guaranteed by the Indian Constitution.

Step 2: Create a Padlet for your group to share online resources related to your topic. Each student has to share at least two resources and explain the main idea of each resource in 1–2 phrases/sentences.

Step 3: Once it is ready, share your Padlet with the whole class.

Step 4: Read all the Padlets created by your classmates and come ready for discussion.

Affordances of Padlet

Functions	Pedagogical Affordances
Students can post numerous online multimedia resources	<ul style="list-style-type: none"> Identification and analysis of thematically relevant information Collaborative sharing of resources to save time Easy access to multiple topic-related resources on a single page Exposure to resources at different levels of language proficiency Understanding a topic from multiple perspectives Increased familiarity with language and content Learning through multimedia resources

Students can edit their comments or respond to peers' comments	Meaningful and sustained peer interaction Deeper levels of comprehension
Students can collaborate asynchronously	Self-directedness in terms of deciding the nature, content and pace of reading Development of reflective reading practices leading to content and language gains

Enhanced Learning Outcomes

Digital literacy—students use technology tools to find, analyse and evaluate thematically relevant multimodal sources of online information; adopt ethical resource sharing practices; learn to work with peers

ESL learning outcomes—students develop extensive reading skills; acquire a broader understanding of the topic; identify main ideas of a text; acquire content-related vocabulary

Task 2: Convergence of Speaking, Reading and Note-Making Skills

<p style="text-align: center;">Original task: (continued from Task 1)</p> <p>While discussing, make notes on the following points: Causes of poverty and means of overcoming it Discrimination based on gender, religion, class, etc. Constitutionally guaranteed human rights (p. 26)</p>

Classroom Constraints: Most students find making notes while speaking, discussing or listening to others a cognitively challenging activity. Secondly, it is difficult for one student to effectively keep track of all threads of discussion of a topic as varied as the present task.

Collaborative note making on Google docs can help overcome these constraints. Google docs (www.docs.google.com) allows students to create a document together by writing, editing and communicating in a synchronous or an asynchronous setting.

Redesigned Task

Step 1: Using information you read in class Padlets, discuss the following in your group:

- Causes of poverty and means of overcoming it
- Discrimination based on gender, religion, class, etc. and
- Constitutionally guaranteed human rights

You can also consult Padlets during your discussion.

Step 2: Start making notes on the table created for your group on Google docs*. Keep adding to it as the discussion progresses.

- Ask questions if you do not understand or agree with what a group member has written. Inform and explain before you delete or modify what someone else has written.

* The following table is created on Google docs for each group.

	Discrimination based on gender	Discrimination based on religion	Discrimination based on class	Discrimination of the poor
What is it?				
What causes it?				
How to overcome it?				
What does the Indian Constitution say about this?				
<i>Would you like to add anything to make the Constitution more effective?</i>				

Affordances of Google Docs

Functions	Pedagogical Affordances
Students can make notes collaboratively while discussion is in progress	Opportunities to learn from peers More dynamic engagement with the note-making activity (compared to individual note-making activity) Richer learning gains than when discussion is a standalone activity Exposure to diverse views

Students can edit and delete notes	Self-learning and peer-learning opportunities Synthesis of ideas from multiple sources Development of reflective writing practices
Students can access group notes easily at any time	Scaffolding of individual speaking Meaningful and interactive face-to-face discussions

Enhanced Learning Outcomes

Digital literacy—students use technology tools to synthesize multiple sources of information; develop critical thinking skills by blending inputs received from face-to-face peer interaction and digital collaboration activities; develop independent thinking skills by forming and articulating their views carefully; demonstrate responsible communication behaviour on digital platforms

ESL learning outcomes—students acquire content knowledge and use linguistic knowledge for discussion; acquire reading, speaking and writing skills in an integrated manner; understand the use of note-making as a study skill; develop an awareness of the benefits of peer-learning

Task 3: Articulation Between Speaking and Multimodal Writing

<p>Original Task (continued from tasks one and two above) Using your notes speak for two minutes on ‘True liberty is freedom from poverty, deprivation and all forms of discrimination.’ (p. 26)</p>

Classroom Constraints: Most teachers find it difficult to administer individual speaking tasks in class as they take a large chunk out of instruction hours. Secondly, when asked to use notes to guide speaking, most students end up reading from their notes. And the most common constraint of all speaking activities in an ESL classroom is that many students who lack language and/or are shy refuse to speak in English in front of their peers.

Voice Thread can help overcome these constraints. Voice Thread (<https://voicethread.com/>) is another collaborative tool that helps students create multimedia presentations. It also permits students to leave comments and interact with peers in spoken, written or video formats.

Redesigned Task

Step 1:

Based on your reading, group discussion and notes, each of you has to choose a topic to speak on. Your topic must be related to the theme: 'True liberty is freedom from poverty, deprivation and all forms of discrimination.'

Step 2:

Consult Padlets and Google docs created by your class and make notes on your topic. Then practice speaking for two minutes.

Step 3:

Access the class VoiceThread created by your teacher. Start a slide for you – add your name and the topic of your speech. Then share the main points of your speech on the slide. You can also add images to illustrate your topic, doodle, add multimedia resources, etc. to support your topic.

Step 4:

Record your speech. Play back and listen to it carefully. Re-record until you are satisfied. Then publish your speech on the VoiceThread.

Affordances of Voice Thread

Functions	Pedagogical Affordances
Students can collaborate asynchronously	Confidence to speak Building reflective thinking Opportunities for constructive feedback from teacher and peers
Students can delete and re-record	Adoption of self-correction practises
Students can publish and share student output	Promotion of student agency Motivation to speak better due to the presence of an authentic audience
Each student can demonstrate their learning on a single page	Better ownership of the task Stronger audience engagement (by presenting information in visually appealing ways)
Students can present multiple modes of content on the same page	Presentation of multimodal sources of information that work together to strengthen ideas Focused speaking (due to the availability of written notes) Purposeful listening (as main points are shared) Comprehensive assessment (due to the presence of written notes along with the spoken text)

Enhanced Learning Outcomes

Digital literacy—students use technology tools to create information; leverage multimedia content to deliver a more impactful message; learn to share information on digital platforms

ESL learning outcomes—students feel motivated because everyone gets a chance to speak; gain confidence and develop interactional competence in English; develop a sense of empowerment through self-correction opportunities with the use of monitor; gain a better understanding of how writing and speaking can complement each other

Conclusion

In our presentation of the three tasks, we have looked at how constraints in ESL tasks in coursebooks can be addressed by the ESL teacher if she/he creatively engages to redesign and deliver language tasks through Web 2.0 tools. With their easy access to multimodal sources of online information, possibility for sustained and asynchronous interaction with a wider audience, potential for shared production of digital microcontent, and easy-to-use features to create and publish content, Web 2.0 tools when used to deliver language tasks seem to be capable of helping ESL teachers overcome task constraints by providing learners cognitive scaffolding, elaboration of content, language support, and catering to their affective factors like motivation, anxiety, personality traits, and learning styles.

The tasks presented in the paper illustrate the use of Web 2.0 tools to enable two optimal conditions for language learning, viz. collaboration and personalization in the ESL classroom. These conditions create a positive impact on language learning outcomes and also introduce students to newer modes of reading, writing, speaking and thinking, thus facilitating their understanding, construction and engagement of new literacy capabilities.

If the goal of education is to help students achieve personal and professional development, our instructional practices need to mould our students to become 21st century citizens. This paper makes a strong exhortation to use the 4 Cs framework to leverage use of Web 2.0 tools to deliver language learning tasks, and illustrates how this can help teachers integrate digital literacy skills with language learning outcomes for 21st century learners.

Endnotes

1. The American Library Association explains digital literacy as the ability to “use information and communication technologies to find, understand, evaluate, create and communicate digital information.” (ALA, 2013, p. 1).
2. Also called gate skills, transferable skills or 21st century workplace skills, various education agencies like UNESCO (2012); European Union (2006) and ISTE (2016), agree that the 4 Cs are key competencies for successful deployment of digital literacy skills and essential contributors to enhanced employability opportunities and workplace success.

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