Teaching Online Reading Skills with Authentic Materials – A Blueprint for a 21st Century Classroom"

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ABSTRACT

A lot of reading is done in the online mode these days. In fact, reading from the computer/ smartphone screen is a fact of life in the 21st century and the ability to access, read, and comprehend texts online are necessary 21st Century Skills. Therefore, the teaching of reading skills should necessarily take into consideration the online reading experience. This paper attempts to present a blueprint of a classroom where the learners read and comprehend authentic material on their smartphone screens using language learning strategies (LLS). However, the focus of the design essentially remains on pedagogy and not on technology; it features the application of available resources and accessible authentic materials.

Keywords: strategies, authentic materials, online reading

Introduction:

The use of technology in language teaching is an inevitability in the present times. The COVID-19 pandemic really expedited the inclusion of technology in language teaching almost in a compulsory manner. Researchers Chun, Kern, & Smith (2016), noting that the use of technology is only a means to an end which is to support the process of learning, brought out the factors that need to be taken into consideration while incorporating technology into pedagogy – the goal of learning, the abilities and interests of the learners, the availability of resources and the academic ambience where teaching-learning is taking place. Regarding task design, Chun et al. (2016), stated that teachers must work on the creative use of technologies for the required development of communicative competence. They noted that reading and comprehending content on the web page is a part of the 21st century skill which implies that our ideas about teaching/learning reading skills must reflect the broader goal of reading texts not only on paper but also on computer/mobile screens. Therefore, teachers need to carefully study how learners appreciate the use of technology in language learning and guide them into becoming critical users of technology that aids their language learning process.

Objective:

This paper aims to develop a blueprint for a tertiary-level classroom in the Indian context for teaching English reading skills to learners using –

a. smartphones,

b. authentic materials from the web,

c. language learning strategies (LLS) instructions,

d. downloaded apps like WhatsApp, Google Drive, Google Forms, Quilgo, etc.

A review of literature:

Writing about language teaching through technology, Jayaprakash (2019) advocates the exploitation of social networking/messaging apps such as WhatsApp, Facebook, and the likes for

pedagogic ends as it is simply impossible to herd students away completely from the virtual world: "Instead of attempting to divert the student's attention from them to the "real" classroom, it would be more worthwhile to take the learning tools, or even better, the classroom itself to the virtual world". This argument justifiably upholds the case of developing a suitable pedagogy for the digital natives of the 21st century.

Newhouse (2017) noted that digital technology-based learning need not necessarily be considered a new way of teaching and learning rather it should be appreciated just like any other technology which supports improved quality of teaching and learning by providing a bigger range of choices. The key aspects of the use of ICT, as stated by Newhouse (2017), vis-à-vis language learning include –

- the activation of imagination and easing of boredom, creating scope for a convenient and suitable learning environment;
- and enabling the tapping of resources from diverse areas for teaching and learning.

Goertler (2009) noted that pedagogy and not technology should be the guiding light in a classroom where the implementation of Computer-Mediated Communication (CMC) is intended; the instructor in such a class should find out the "appropriate CMC tool and properly situate the task in an authentic context". Lai and Morrison (2013) emphasized the role of affect and attitude in the success of technology-enhanced language learning; which means that the instructor must provide necessary affective support to learners during the process.

Reading from the computer/mobile screen will naturally be slightly different from reading what is on a piece of paper. Research done on reading computer-based texts and online reading activities has thrown an interesting light on this type of reading. Park and Kim (2016), in their study of English Language Learners' use of strategies in reading computer-based texts at home and school, noted that learners in reading computer-based texts use dynamic reading strategies dialogically. They developed a taxonomy of strategies concerning reading diverse computer-based texts, which is presented as under:

Sl No.	Categories	Reading strategies for computer-based texts
1.	accessing computer-based texts	accessing a web page, hypermedia;using references;
2.	use of computer literacy	scrolling up and down and moving back and forth, using computer skills;
3.	making critical decisions	previewing, evaluating the text/deciding what to read;
4.	dialogic connection	dialoguing, making a connection,sharing an information source;
5.	active participation in computer-based text reading activities	adjusting the reading pattern, monitoring comprehension,inferring from the text,confirming a prediction.

The study by Park and Kim brought forth a few major conclusions: a) young learners when reading computer-based texts, "engage in virtual, imagined and real dialogues with others, themselves and texts"; b) young learners use "diverse strategies dialogically when reading computer-based texts in diverse contexts"; c) the "complexity of reading could be understood from a dialogic perspective".

Some crucial findings on online reading:

Cho, Woodward, Li, and Barlow (2017) – from a study involving forty-three high school students – reported the following requirements for a successful online reading experience:

a. instructions from the teacher as regards the complexity of online reading with authentic texts;

b. adequate scaffoldings;

c. teacher modelling and classroom talks;

d. dialogic interactions among themselves and openness to explore new sources, knowledge, and perspectives beyond the boundary of a given text;

e. systematic strategy instructions with ample opportunities for reflections and self-assessments.

So far as the choice of authentic material for the teaching of reading skills is concerned, it may be pertinent here to refer to a crucial finding about the impact of reading fiction on language learners – Krashen (2020) noted a study by Ponniah and Priya (2008) which found fiction readers outperforming non-fiction readers on tests of English as a foreign language. Drawing inference from the results, Krashen noted that fiction or aesthetic texts do contain substantial academic language which can significantly raise the academic competence of English learners. This observation has important implications for the choice of authentic materials for the teaching of reading skills – both in the regular face-to-face mode and in the online mode.

The use of metacognitive and cognitive strategies vis-à-vis development of online reading skills:

From their study on the effects of meta-cognitive instruction on students' reading comprehension in computer reading contexts, Yi-Chin Lan, Yu-Ling Lo, and Ying-Shao Hsu (2014) noted their assumption that "less skilled readers would benefit more from instructions than those who already have sophisticated reading skills and/or strategies". They pointed out that the effect of meta-cognitive strategy instruction on the reading comprehension of students can be enhanced with a well-designed computerized reading context.

Mobile/Computer apps in language learning:

Online teaching necessarily depends on apps. Rosell-Aguilar (2017) pointed out that there are certain device native apps or installed apps (not designed for language learning as such) that can be of immense use in language learning using mobile phones. The pandemic years have shown how apps not originally meant for teaching purposes (e.g., Zoom, Google Meet, Padlet, Microsoft Teams, Google Form, etc) were adapted for online language classes with positive outcomes.

For elucidation, a reading task is designed with an article titled "Microbes at the top of the world" from *The Hindu* E-paper dated 23.04.2023:

Microbes at the top of the world

SPEAKING OF SCIENCE

D. Balasubramanian

An article, *Genetic analysis of the frozen microbiome at 7,900 metres above sea level on the South Col of Sagarmatha (Mount Everest)*, by Dr. N.B. Dragone and others in journal *Arctic, Antarctic, and Alpine Research* examines the human microbiota on the inhospitable slopes of Mount Everest.

They were able to collect microbial communities in sediment samples left by human climbers on the South Col of Mount Everest, 7,900 metres above sea level (msl).

The South Col is the ridge which separates Mt. Everest from Lhotse – the fourth highest mountain on earth. The two peaks are only three kilometres apart. At 7,900 msl, the South Col is rather inhospitable – a heat wave in July 2022 led to a record high temperature of minus 1.4 degree Celsius.

Barring humans, visible signs of life have been left behind. The last visible residents are seen at 6,700 msl – a few species of moss and a jumping spider that feeds on frozen insects carried by the wind.

At high altitudes, there is low oxygen (7.8% against 20.9% at sea level), strong winds, temperature usually below minus 15 degree Celsius, and high levels of UV radiation. All these make life processes difficult. And as there is an interdependence among species of all sizes in all ecosystems, even microbes cannot sustain themselves.

Wind and humans

But microbes keep arriving, carried by either birds, animals, or winds. Up to about 6,000 msl, dust particles, less than 20 micrometre in diameter, are blown in by the winds. Some of this dust originates in the Sahara Desert, which explains why a wide range of microflora are found at these altitudes. Above 7,000 msl, it is mostly winds and humans that act as carriers.

Transported: A cosmopolitan human signature is seen in the microbes collected at the South Col on Mount Everest. GETTY IMAGES

Using sophisticated methods such as 16S and 18S rRNA sequencing, the microbe hunters were able to identify the bacteria and other microorganisms found on the South Col. A cosmopolitan human signature is seen in the microbes collected here. Also found are *modestobacter altitudinis* and the fungus, *naganishia*, which are known to be UV-resistant survivors.

Who gave the name 'sagarmatha' to Mt. Everest? Nepal's eminent historian, late Baburam Acharya, gave it the Nepali name, *sagarmatha*, in the 1960s.

Kangchenjunga peak

In 1847, Andrew Waugh, British Surveyor General of India, found a peak in the eastern end of the Himalayas which was higher than the Kangchenjunga – considered as the highest peak in the world at that time. His predecessor, Sir George Everest, was interested in high-altitude hills and had deputed Waugh to take charge. In true colonial spirit, Waugh called it the Mount Everest.

Researchers collected microbial communities in sediment samples left by human climbers on Mt. Everest

The Indian mathematician and surveyor, Radhanath Sikdar, was an able mathematician. He was the first person to show that Mount Everest (then known as peak XV) was the world's highest peak.

George Everest had appointed Sikdar to the post of 'Computer' in the Survey of India in 1831.

In 1852, Sikdar, with the help of a special device, recorded the height of 'Peak 15' at 8,839 metres. However, it was officially announced in March 1856.

The model of instruction follows the five steps of the CALLA framework namely, preparation, presentation, practice, self-evaluation, and expansion:

1. Preparation phase:

The teacher shares the micro-skills of reading as a document in the WhatsApp group; he/she highlights –

- factual/inferential comprehension;
- implied meaning/conceptual meaning (abstract/theoretical ideas);
- the use of real-world knowledge/background knowledge for comprehension;
- lexical cohesion and the relationship between parts of the text;
- the need to recognize the indicators (for example, that is, therefore, to conclude, etc);
- the need to distinguish the main idea from the supporting details and identify the key points;
- the need to use skimming/scanning for specific information and close reading techniques.

The teacher instructs the students about the key metacognitive strategies (planning, monitoring, evaluating, and managing their learning) and task-based strategies (using background knowledge, inferring, predicting, personalizing, paraphrasing, using cognates, using kinesthetics, finding patterns in the text, classifying, taking notes, using graphic organizers, summarizing, accessing virtual dictionary/Wikipedia/ Encyclopedia, cooperating, etc) (Chamot, 2009, p. 58).

2. Presentation phase:

The teacher shares the text **("Microbes at the top of the World")** in the WhatsApp group and demonstrates how to use the micro-skills of reading, metacognitive and task-based strategies for comprehension. The importance of the para-text/accompanying pictures in the comprehension process must be emphasized. The teacher draws the students' attention to the headline, the pictures, and the highlighted text (upper case, bold and underlined) – "Speaking of Science," "Researchers collected microbial communities in sediment samples left by human climbers on Mt. Everest." The highlighted words and pictures will give the readers crucial clues - that the passage is on a scientific topic and about the 'height' of contamination – how human interference has caused microbial pollution even in the Himalayas. The students scan and skim for key information, engage in dialogic interactions, and access resources (online dictionaries/Wikipedia/ Encyclopedia, etc) for clarifications. The teacher nudges the students to use the relevant task-based strategies mentioned during the preparation phase. Both the teacher and the students read the text – the former loudly and the latter silently – from the smartphone/computer screen, and identify the topic sentence and key points in each paragraph.

3. Practice phase:

The students answer a set of comprehension questions on the article read; the questions are shared as an online quiz prepared using Google Form; a timer (Quilgo, for instance) is set so that the learners complete within the given time (10 - 15 minutes). The questions designed are MCQs with one correct answer. The options given for each question are consistent in length and are designed to make the test adequately challenging and purposeful. There is only one correct answer but the distractors are plausible which makes the task cognitively challenging. The questions do not follow the sequence of the passage and so the learners must move back and forth – skimming, scanning, and doing close reading of the text. The learners, if required, can make use of pen and paper to note down key points and ideas.

Serial No.	Questions	Question type
1.	RadhanathSikdar was a. a computer expert with the Survey of India b. a mathematician with the Survey of India c. a mountaineer working for the Survey of India d. all three options given above are true **Answer**: b	Factual
2.	What was the 'record high temperature' recorded in the South Col of Mt. Everest in 2022? a. 1.5 degrees Celsius b. -4 degrees Celsius c. -1.4 degrees Celsius d. 14 degrees Celsius **Answer**: c	Factual

3.	*Sagarmatha* is the name for a. the Annapurna peak in the Nepali language b. the Mt. Everest in the Nepali language c. the Himalayas in the Nepali language d. the Indian Ocean in the Nepali language **Answer**: b	Factual
4.	The fungus *Naganishia* a. originate from the Sahara Desert b. is a UV-resistant survivor c. is the only microorganism in the Himalayas d. all three options given above are true **Answer**: b	Factual
5.	The expression 'microbe hunters' mean a. those who destroy microbes to protect human lives b. mountaineers who hunt down microbes while trekking c. scientists who are engaged in studying microbes d. all three options given above are true **Answer**: c	Factual/Inferential
6.	Life process is difficult at high altitudes because of a. low oxygen, lack of water, low temperature, & high UV radiation b. low oxygen, thick ice, low temperature, & high UV radiation c. low oxygen, strong winds, aridity, & high UV radiation d. low oxygen, strong winds, very low temperature, & high UV radiation **Answer**: d	Factual
7.	What carries microflora to the high altitude of the Himalayas? a. humans and insects b. humans and birds c. humans and wind d. birds and wind **Answer**: c	Factual
8.	The South Col is a. a peak b. a ridge	Factual

	c. a plateau d. a range **Answer**: b	
9.	Jumping spiders a. are one of the last visible residents at 6000 msl b. are the only visible residents at 6700 msl c. are one of the last visible residents at 6700 msl d. are the only visible residents at 6000 msl **Answer**: a	Factual
10.	How is the 'colonial spirit' reflected in the naming of Peak XV as Mt. Everest by Andrew Waugh, the Surveyor General of India? a. since it was named after George Everest who proved that Peak XV was the world's highest peak b. since it was named after George Everest the British Surveyor General who measured the exact height of the peak c. Although located in Asia and measured by an Indian mathematician, it did not get an Indian/Asian name. d. since it was named after George Everest who led the team of mathematicians and cartographers who surveyed the Himalayan range **Answer**: c	Inferential/ background knowledge
11.	The abbreviation 'msl' stands for – a. mountain sea land b. mountain sea level c. mean sea level d. maximum sea level **Answer**: c	Inferential/ background knowledge

4. Self-Evaluation:

The reading test in the practice phase aims to help students understand their level of comprehension. The teacher in the class is always around to help the learners. While designing the quiz, the teacher may feed the right answers into the Google Form so that students get their scores as soon as they submit. The learners share their experiences with their peers and the teacher gives necessary verbal feedback.

5. Expansion:

Depending on the scope and the feasibility, the teacher shares a second online reading task prepared using a similar authentic material as another classwork or as homework (if there is a

paucity of time). For this round of assessment, the teacher may manually release the marks after giving appropriate feedback. This process may be repeated; the teacher can also share links to more online reading resources in the WhatsApp group.

Conclusion:

It is a common observation that netizens read extensively from their smartphones and computer screens these days and therefore it is pertinent that language learners are taught how to employ micro-skills of reading and LLS for comprehending authentic materials from the web. The paper attempted to design a model for a reading classroom where the learners are taught to employ micro-skills of reading and LLS systematically using smartphones. The design, based on the existing LLS model, is suitably adapted to the new scenario. Practitioners need to be careful about choosing suitable authentic material according to the level of the learners so that reading comprehension exercise becomes an adequately challenging and interesting activity.

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