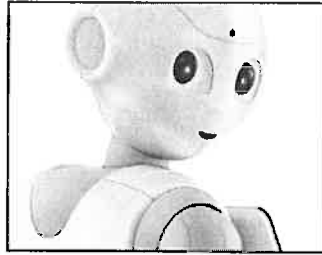


Where is the D (Digital) in EFL Reading-to-Learn Contexts? Fredricka L. Stoller and William Grabe

(References compiled in January 2018; starred items provide specific instructional suggestions.)

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Looking into the Eyes of a Robot



- 1 Imagine a not-too-distant future. You walk into a bank and explain your business to the clerk. She smiles at you. It's a friendly smile. The corners of her eyes turn up, and her head moves, but something is missing in her eyes. You look again, and suddenly you realize that you are not talking to a person. You are talking to a machine. You look around. There are other robot clerks at the bank. They are also smiling at human customers.
- 2 Most people feel uncomfortable when they meet a human-like robot. They might even feel fear or disgust. Every human response is different because every person is different, but most humans don't like robots that look *almost* human.
- 3 Researcher Masahiro Mori studied and built robots in the 1970s. He also watched people and robots. He noticed that people usually liked robots that looked like robots. People described such robots as cute or cool, but *only* when the robots looked like machines.
- 4 Then technology advanced, and human-like robots appeared. Their faces could express emotions such as happiness, anger, and sadness. These robots were also programmed with speech, so they could answer questions and have simple conversations. However, human-like robots made people feel uncomfortable. Some people were afraid of them. Others felt disgust.
- 5 Conversely, when a robot looks and acts like a machine, people admire it. Our eyes tell us it is a machine, and we treat it like a machine. In Japan, cute robots are becoming companions for lonely people, especially the elderly. Many older men and women live alone, and they feel sad. Now they can have a robot friend. A robot can chat with a grandfather or calm a patient with memory loss.
- 6 A robot named Pepper is now popular in Japan. Pepper has eyes and a young man's voice, but it has a small white robot body. Designers made a decision to mix human and robot elements because they wanted people to like Pepper. Pepper's job is to be a friend, so it talks to humans in a pleasant voice. The robot has scanners that identify facial expressions and audio technology that measures voice. Pepper's programming matches a helpful response to its human friend.

Digital Reading: Challenges and Opportunities

TASK II: Digital reading in EFL reading-to-learn contexts creates a number of challenges. Which 2–3 challenges (✓) pose the biggest problems for your students?

1. ___ Potential for endless distractions (e.g., links to videos, audio, images) and loss of focus on purpose for reading
2. ___ Hyperlinks that result in non-linear reading
3. ___ Lots of (often unfiltered) information, which creates demands for the reader
4. ___ Lack of transparency, in terms of authorship, source, accuracy, bias, and ultimately reliability
5. ___ Need for self-regulation, as readers (a) move from one link to another and (b) determine when they've read enough to accomplish their goals
6. ___ Mismatch between students' perceptions of their digital abilities and their ability to read digitally in reading-to-learn contexts
7. ___ Teachers' attitudes, knowledge, skills, and experience with digital reading and related instruction
8. ___ External barriers (e.g., restricted or limited access to online sources, absence of teacher training and support)

TASK III: Digital reading in EFL reading-to-learn contexts also creates teaching opportunities. Which 3–4 opportunities might you prioritize for your classroom? *Choose from both groups and check (✓).*

- A. Guide students in using strategies to
 1. ___ manage browsers, search engines, and keyword searches
 2. ___ maintain goal(s) for reading
 3. ___ determine authorship, bias, claims, and evidence
 4. ___ use source features to assess reliability
 5. ___ navigate multimedia
- B. Build students' capacity to
 1. ___ self-regulate (i.e., monitor comprehension, adjust strategy use for reading purpose)
 2. ___ match digital resources to goals
 3. ___ find connections across multiple texts and text types
 4. ___ make use of online enhancements (e.g., bookmarking, highlighting, glossaries)
 5. ___ read extensively, continuously, and for comprehension

Where is the D (Digital) in EFL Reading-to-Learn Contexts?

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TASK IV (“One Click” adapted from Leu et al., 2015): Consider the results of our search about robots and the workforce (sites A-I on page 5). For each question, select the link (A-I) that you believe most accurately answers the question. *Check (✓) the factor(s) that influenced your decisions.*

1. Which link will lead to a research article on a government website? ____

What information helped you choose your answer? *Check all that apply.*

- Title of the link
- URL
- Blurb
- Familiarity with the website

2. Which link will lead to a local story? ____

What information helped you choose your answer? *Check all that apply.*

- Title of the link
- URL
- Blurb
- Familiarity with the website

3. Which link will lead to an advertisement that may try to sell you something? ____

What information helped you choose your answer? *Check all that apply.*

- Title of the link
- URL
- Blurb
- Familiarity with the website

4. Which link will lead to a video about the topic? ____

What information helped you choose your answer? *Check all that apply.*

- Title of the link
- URL
- Blurb
- Familiarity with the website

5. Which two links lead to websites that cite the same external study? ____ & ____

What information helped you choose your answer? *Check all that apply.*

- Title of the link
- URL
- Blurb
- Familiarity with the website

6. Which link leads to a website about robots like Pepper (mentioned in textbook)? ____

What information helped you choose your answer? *Check all that apply.*

- Title of the link
- URL
- Blurb
- Familiarity with the website




robots and the workforce



All News Videos Images Shopping More Settings Tools

About 696,000 results (0.63 seconds)

- A** This company replaced 90% of its workforce with machines. Here's ...
<https://www.weforum.org/.../after-replacing-90-of-employees-with-robots-this-compa...> ▾
Feb 16, 2017 - The rise of the **robot workforce**. It's hard to argue against automation when statistics are clearly illustrating its potential. The latest evidence ...
- B** Six jobs are eliminated for every robot introduced into the workforce, a ...
<https://www.recode.net/2017/3/28/.../jobs-eliminated-new-robots-workforce-industrial> ▾
Mar 28, 2017 - Job-stealing robots aren't some distant scenario that's unlikely to cause problems for another "50 to 100 years" from now, as Donald Trump's ...
- C** Robots In The Workforce Cost 6 Jobs Each | Fortune.com
<fortune.com/2017/03/29/robots-workforce-labor-jobs-united-states/>
Mar 29, 2017 - A new study shows that robots are already causing job losses and cutting wages.
- D** Cambodian Teens Hope to Win at Global Robot Making Contest
<https://www.voacambodia.com/a/cambodian-teens-hope-to...robot.../3919798.html> ▾
Jan 28, 2017 - Kim Vanthen (left) database manager at Caring for Cambodia and high school robot makers in Siem Reap. (Photo courtesy of Kim ...
- E** Robots Will Devour Jobs More Slowly Than You Think - MIT ...
<https://www.technologyreview.com/.../robots-will-devour-jobs-more-slowly-than-you...> ▾
Jan 13, 2017 - An automated **workforce** is inevitable, but humans may labor alongside machines for the foreseeable future.
- F** The Impact of Robotics on Employment and Motivation of Employees ...
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4266810/>
by MO Quesshi - 2014 - Cited by 13 - Related articles
Jul 29, 2014 - Keywords: employment, health care sector, motivation, **robotics** ... has announced plans to add more than one million robots to its workforce. The Wall Street Journal reports that positions such as licensed practical nurses ...
Introduction · Materials and methods · Results · Discussion
- G** Is There A Robot 'Friend' In Your Future? - Forbes
<https://www.forbes.com/sites/nextavenue/.../is-there-a-robot-friend-in-your-future/> ▾
Oct 4, 2017 - The idea of a robot as health care aide — and even "friend" — is not as crazy as it may seem, especially given the aging of the population.
- H** Robots Will Affect Workforce by 2025 - YouTube
 <https://www.youtube.com/watch?v=j1Co0-UqGI4> ▾
Aug 6, 2014 - Uploaded by Wall Street Journal
The Pew Research Center asked 1900 technology experts if robots will help or hurt the workforce over the ...
- I** Hitachi - Robotics Technology
(Ad) www.social-innovation.hitachi/us ▾
Programmed with our IoT platform, Hitachi robots process the world around them.

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Building Upon Classroom Textbooks with Digital Reading

We can build upon our textbook units by (a) integrating digital reading into our classes and (b) helping students

- ✓ stay focused on their reading goals
- ✓ monitor their comprehension
- ✓ critically evaluate digital sources of information for relevance and usefulness (with classroom task in mind)
- ✓ match strategy use to purpose(s) for reading, for example,
 - a. Preview text (to determine usefulness)
 - b. Connect to background knowledge
 - c. Predict (and check predictions)
 - d. Skim for the main idea
 - e. Scan to locate specific information
 - f. Read to learn/find something new
 - g. Use text structure (organization) to guide understanding
 - h. Make use of online enhancements (bookmarking, highlighting, glossaries)
 - i. Keep track of digital materials as students move from one website to another
 - j. Integrate multiple sources of information
- ✓ read extensively, continuously, and for comprehension