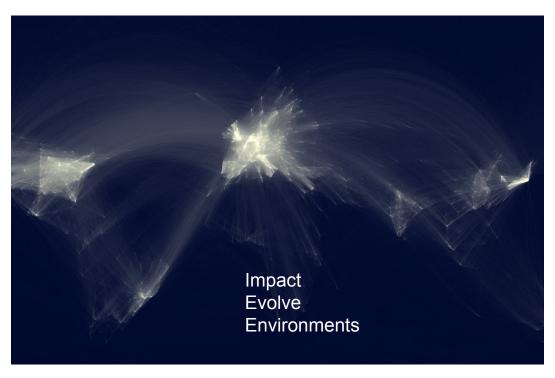


Teaching and Learning in a Digital Age

Ann Hill Duin, Ph.D., ahduin@umn.edu Professor, University of Minnesota 23 May 2017





## **Impact**

What impact do digital technologies have on teaching and learning?

How is technology changing teaching and earning?

Flexibility

Access

**Digital literacy** 

Cultural awareness and globalization

GURE 1. Traditional Literacy vs. Digital Literacy

Traditional Literacy	Digital Literacy
Finding information	Vetting information
Reading (emersion)	Skimming (searching for solutions)
Note-taking	Curating
• transcribing	• linking
Prose composition	Multimodal composition
	• information design
	• data visualization
	• dynamic storytelling (video)
	• coding/programming
Static artifacts	Dynamic assets (multiple, diverse, reusable)
Learns from teachers	Teaches self
Permanence	Change

# Our collaboration within the Trans-Atlantic Pacific Project

Writing \_\_\_\_\_ Usability Testing \_\_\_\_\_ Translation



# TRIESTE English Language and Translation, English-Italian Translation Module



University of Minnesota: International Professional Communication (online)



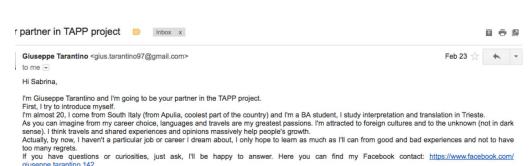


#### Documentation for translation project

This project is conducted under the auspices of the Trans-Atlantic & Pacific Project and includes students registered in Writ 4562: International Professional Communication at the University of Minnesota in Minneapolis, USA, and translation students from the University of Trieste in Trieste, Italy. The picture above is of Professors Palumbo and Hill Duin visiting as part of the preparation of this project.

#### Components of this assignment

- Personal Learning Network
  - 2 visualizations, one at the beginning and one at the end of the project
- · First draft of Instructions
- Usability Test process and Memo
- Final draft of Instructions and Translation Brief
- Reflection Report



gluseppe.larantino.142
What about you? Why did you choose this course of study? It seems to be very interesting, I'd like to know more about it. I'm very excited about this TAPP project and I hope we'll can collaborate good together.

Hope to hear you soon,

\*\*\*

#### Sabrina Diaz <diazx183@umn.edu>

to Giuseppe -

Hi Giuseppe.

Thank you for reaching out to me!

I'm originally from Venezuela (from Caracas, also the coolest part of the country haha), and I moved to the University of Minnesota. My focus is in the area of public relations and advertising, and I would really like to work in a Public Relations agency once I graduate!

I'm originally from Venezuela (from Caracas, also the coolest part of the country haha), and I moved to the United States two years ago. So far, it has been a

Feb 23 ☆ ← -

great experience, except for the really cold temperatures we get here in Minnesotal:

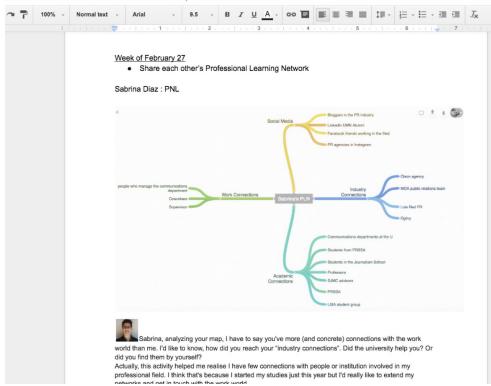
Also, being from Venezuela, I am completely fluent in Spanish (so if any time you want to practice some Spanish, let me know), I am able to understand some Italian because I find it to be somewhat similar to Spanish.

One of my passions is traveling and getting to know new people, so I'm really excited to be collaborating on this project!

I'll send you a friend request on facebook, and same as you, If you have any questions or want to know anything else about me just send me a message:)

Look forward to working together. Best.

#### nal Learning Network (P LN) 🔅 🖿 it View Insert Format Tools Table Add-ons Help Last edit was on March 29



#### 6 DE ABRIL DE 2017 12:19

Hi Sabrina! Is everything ok for today's call?

Hi Giuseppe yes! I get out of class in ten minutes so I'll call you as soon as I get home in about 15 min. Is that okay?

Perfect! Text me 5 minutes before the call

Sure I will 😢



Just got home, I'll call you in 5!



Great!

I don't know why its not working becaase the facetime on my computer usually works

Hi Sabrina, how are you? Hope your spring break was great!

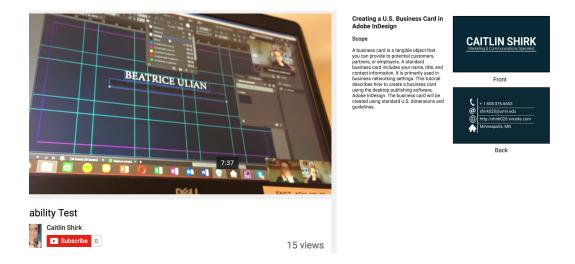
About our project, I added some comments on the Google comments (actually few because it was very well written) and a friend of mine and me made the usability test. We actually just added some events on our Google calendar and made some screenshots of them in order to show we followed all your instructions (and we did it without problems).





Is there anything in particular we have to do? O can I just send you these screenshots?





#### s://www.youtube.com/watch?v=n-6Y45jroww&feature=youtu.be



abrina: "I have really enjoyed the opportunity to be able to learn from someone with a different iltural background. It has increased my cultural awareness, specifically looking at how other iltures work in relationship with projects... After more than I month communicating with each her, I am not concerned anymore of working in an international environment. I believe that if  $\mu$  u share the same goals, and establish the way of communicating at the beginning of any oject, it is easier to avoid issues with miscommunication."



## **Evolve**

How does your teaching evolve with the use of online tools and platforms?

#### How has your teaching evolved?

Dan Pratt (1998) studied 253 teachers of adults, across five different countries, and identified 'five qualitatively different perspectives on teaching,... presenting each perspective as a legitimate view of teaching':

- **Transmission**: effective delivery of content
- Apprenticeship: modelling ways of being
- Developmental: cultivating ways of thinking
- Nurturing: facilitating self-efficacy
- Social reform: seeking a better society

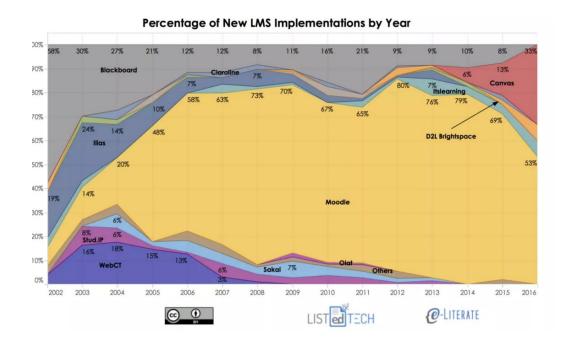
#### **Evolution**

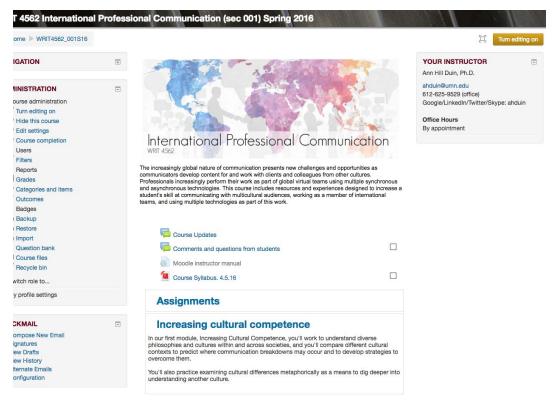
**Augmented** – the use of technology to extend a physical classroom e.g., online discussion forum, guest speakers

Blended – technology partly replaces in-classroom learning
e.g., videos (screencast-o-matic), online feedback (text, audio, video)

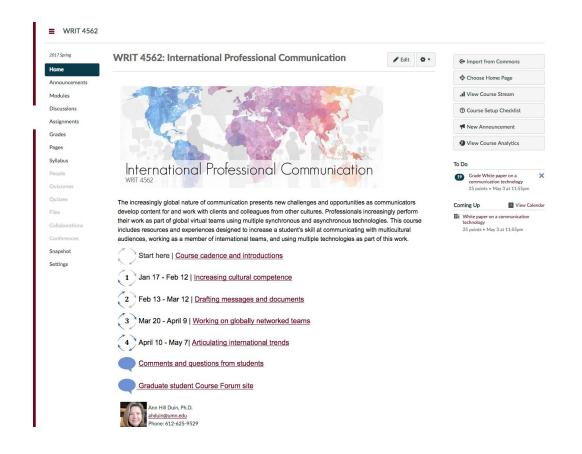
Online – technology entirely replaces face-to-face classroom teaching
e.g., learning management system for
content, discussion, peer review, collaboration, grading...

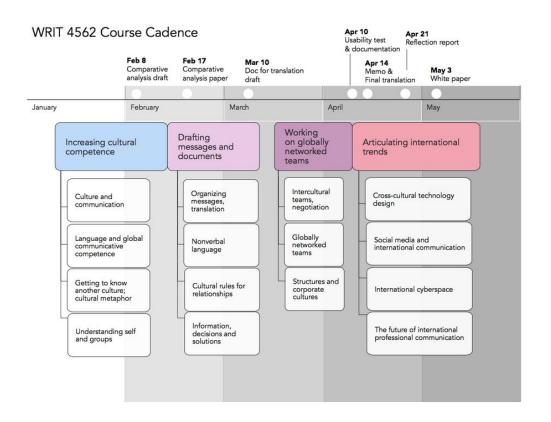
http://elearnspace.org/Articles/HETL.pdf





s://av15 moodle rimn edu/course/view nhn?id=8405







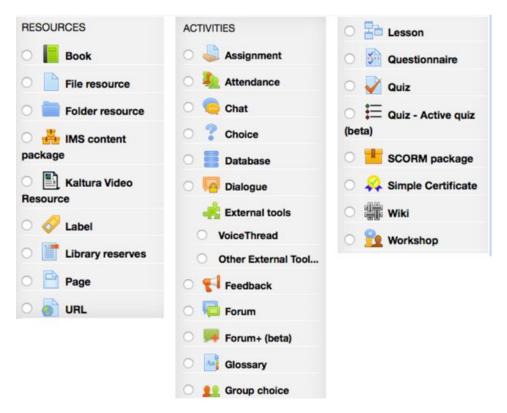


## **Environments**

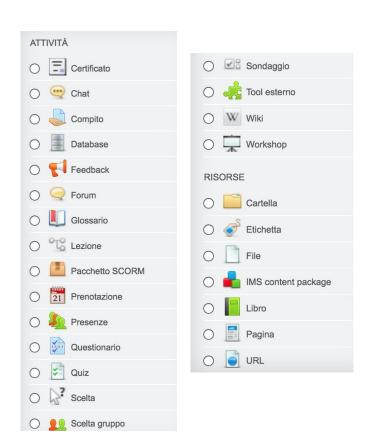
How might you create an *active* online learning environment?

### course components (4 Cs)

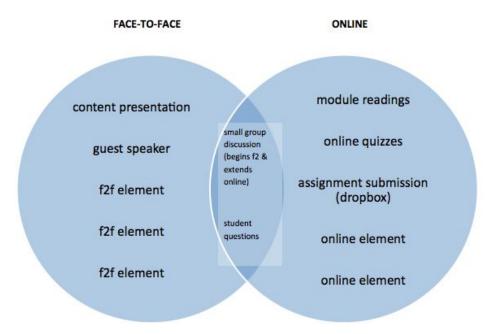
Content	Articles, texts, slide sets, videos, web sites, guest speakers, course forum discussion, wikis
Conversation	Course forum, exercises, simulations, scenarios, case studies, web sites, wikis
collaboration	Projects, case studies, exercises, scenarios, wikis
ritique	Peer review, quizzes / tests, instructor review and evaluation
echnology	Text, email, video, audio, use of Google docs, LMS, Word (track changes)



Moodle options at the University of Minnesota

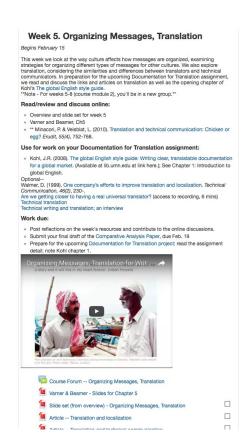


# Consider your teaching strategies for a module. What might be hybrid? What might move online?



Teaching successfully with emerging technologies requires:

- A spirit of **experimentation**
- Willingness to engage learners in the creation of learning resources (co-creation of content)
- Willingness to "let go" of control and content presentation approaches to teaching
- Tolerance of failure



#### Weekly lesson in Moodle

Articles, readings, links to web sites

Clarification of work due

Video overview

Course Forum

#### Weekly lesson in Canvas

Video overview

#### Week 5. Organizing Messages, Translation

This week we look at the way culture affects how messages are organized, examining strategies for organizing different types of messages for other cultures. We also explore translation, considering the similarities and differences between translators and technical communicators. In preparation for the Documentation for Translation assignment, we read and discuss articles on translation as well as the opening chapter of Kohl's The



#### Read and discuss

- 752-768.
- Kohl, J.R. (2008). The global English style guide: Writing clear, translatable documentation for a global market.
   (Available at lib.umn.edu at link here.); See Chapter 1: Introduction to global English.
- Amell, M. (2016). Writing for translation. 
   Senior project for the TWC program.

Walmer, D. (1999). One company's efforts to improve translation and localization ♂. Technical Communication,

Are we getting closer to having a real universal translator? 

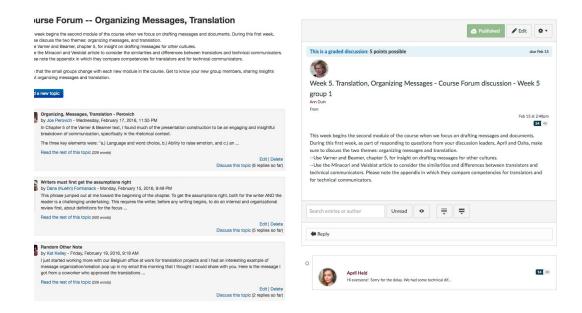
② (access to recording, 6 mins) 

#### Work due

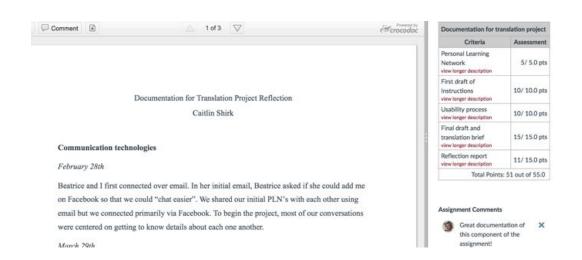
- Post reflections on the week's resources and contribute to the <u>Course Forum</u>.
   Submit your final draft of the <u>Comparative Analysis Paper</u>, due Feb. 17
- Prepare for the upcoming <u>Documentation for Translation project</u>: read the assignment detail; note Kohl chapter 1.

Articles, readings, links to web sites

Work due, Course Forum



#### Course forum conversation



#### /isit one of these sites (or others). How might you use it in teaching?

<u>ittps://www.language-exchanges.org/</u>



https://channel64.resonance.is/



nttp://www.rsc.org/learn-chemistry





Go to <a href="http://screencast-o-matic.com/">http://screencast-o-matic.com/</a>
Click on "Start Recording"
At the next screen, click "Launch Recorder" and click "allow" or "open link"
Record

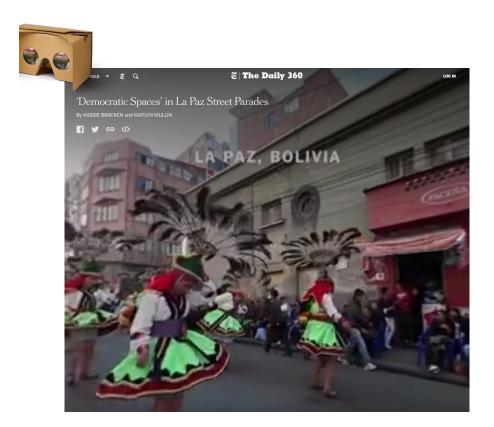








ttps://www.youtube.com/watch?v=dYN4icj3CCY
ttps://www.youtube.com/watch?v=ChhIIB-Rhms





I think that one of the main things that Cardboard can do that helps us beyond just memorizing cultural dos and don'ts is allowing us to immerse ourselves in a culture and observe behavior without being rude.

Using Cardboard, I can see how people interact without having to be a creeper in the background staring at them. This immersion can give us a better understanding of how these dos and don'ts actually function within a culture.

student, Spring 2017

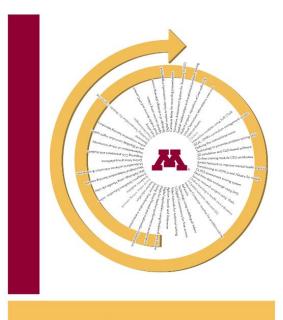
By being "in that culture," even in a VR setting, I can become someone there and experience firsthand the interactions of others from that culture... by experiencing cultures nonverbally (or verbally) in a "safe space," we can learn the mistakes before they even occur, and go into the culture more deeply informed.

student, Spring 2017



http://wrcollab.umn.edu/

## Resources



#### CULTIVATING CHANGE IN THE ACADEMY

50+ Stories from the Digital Frontlines at the University of Minnesota in 2012

University of Minnesota Driven to Discover\*\*\*

# Web-based problem-solving coaches for physics students

Web-based Problem-solving Coaches for Physics Students

Leon Hsu
Ken Heller
Qing Xu
Bijaya Aryal
http://groups.physics.umn.edu/physed/pscoaches.html

#### Introduction

The ability to solve problems in a variety of contexts is an essential skill for all citizens of a modern society and is a major goal of education. Problem-solving skills are particularly important to scientists and engineers and because introductory physics is a gateway course for study in nearly all science, technology, engineering, and mathematics (STEM) fields at the postsecondary level, it is an ideal venue for teaching problem solving. However, although most introductory physics courses have the appearance of emphasizing problem solving, studies have shown that the majority of their students make little progress towards developing good problem-solving skills (Reif, 1995).

Researchers have shown that it is possible, through targeted efforts, to improve students' problem-solving skills (see Maloney (1994) and Hsu, Brewe, Foster & Harper (2004) for overviews). The common thread running through these efforts is that they are all explicitly or implicitly based on the cognitive apprenticeship model (Collins, Brown & Newman, 1989). Two key features of this approach are that the cognitive processes

<u>ttps://cultivatingchangeseries.com/category/changing-pedagogies/ttps://cultivatingchangeseries.com/web-based-problem-solving/</u>

# ternet Computer Coaches For troductory Physics Problem Solving

#### **Kinematics**

Dropped bottle (type 1)

Softball Catch (type 1)

Car off cliff (type 2)

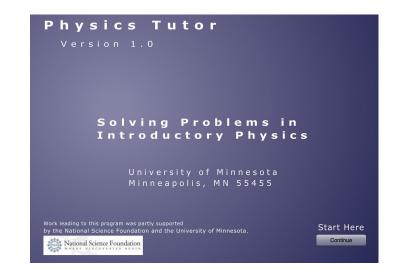
Train catch (type 3)

Archery (type 3)

Robbery Investigation (type 2)

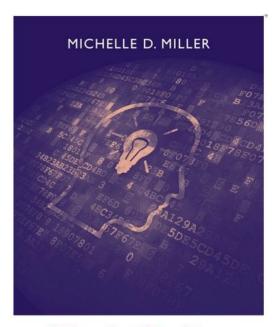
#### **Dynamics**

Elevator lamp (type 1)



ttp://groups.physics.umn.edu/physed/pscoaches.html





# Minds Online Teaching Effectively with Technology

·//www.hun harvard adu/catalog nhn2ichn=078067/3682/8



Let's stay connected!

Ann Hill Duin, Ph.D., ahduin@umn.edu Professor, University of Minnesota 23 May 2017