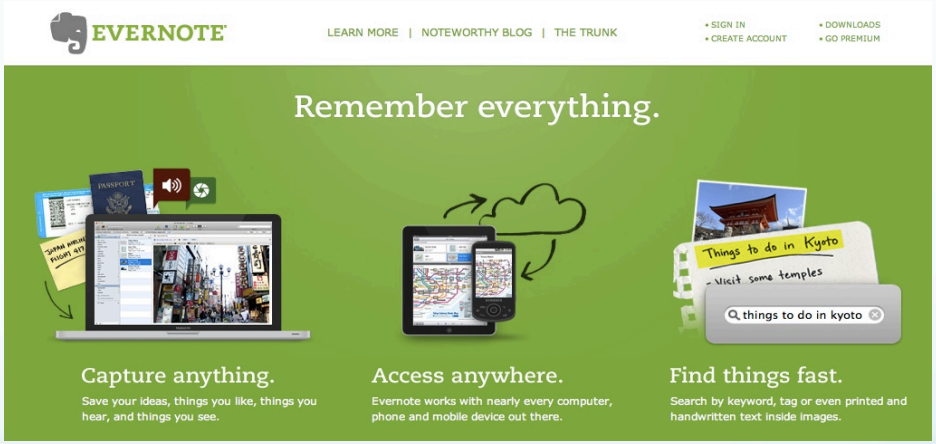
Using The Mobile Application Evernote for Diagnostic Assessment to Enhance Foreign Language Proficiency

Jay Ka
Department of Learning Design & Technology
University of Hawai'i at Manoa / TCC 2016

Audience poll 1

Do you use Evernote ?

- ❑ Yes
- ❑ No



Audience Poll 2

How will the technology take role in education in the future?

A. Technology would reshape the foundation of education .

B. Technology would have some effect in the education .

Overview of Presentation

Background - DA, Proficiency Test, Challenges

Design – Design Theories, Tools, Literature Reviews

Methodology – T. Audience, Data Analysis

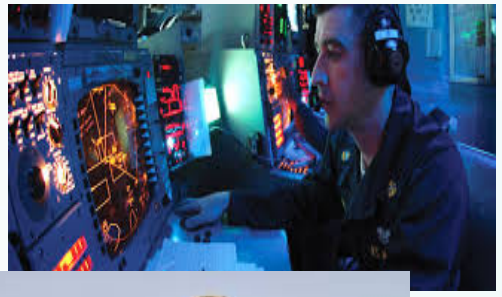
Findings – Feedbacks, Attitudinal Data

Conclusion – Module Effectiveness, Future Plan

Questions & Answers

DoD Requirement & Test

- Elevated DoD language proficiency standard (2 =>2+) / Advance=> Advance plus
- Defense Language Proficiency Test minimum requirement 2+



Proficiency

- Measure what the learner can do with the language in real- life situations
- Fluency, accuracy

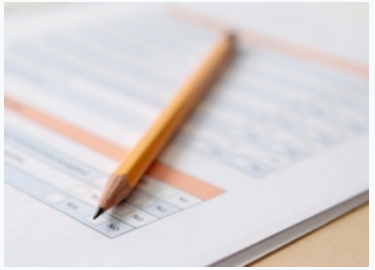
To meet this requirement

Military instructors

- Must be able to determine how well students are learning
- Gauge student's proficiency level
- Provide formative recommendations
- Enhance language proficiency

Current DA

- Paper & pencil, tape recorders, sticky notes, mind notes
- One-on-one , Face-to-Face format
- Time consuming : 5 hours +
- Misplacing memos, notes & records



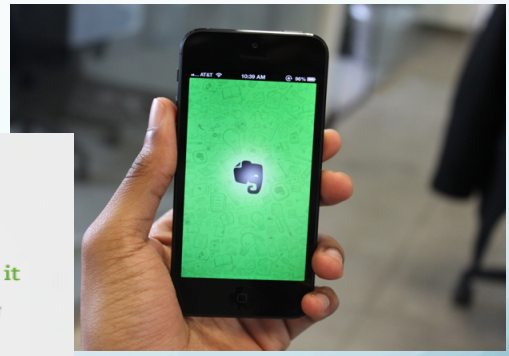
Solution

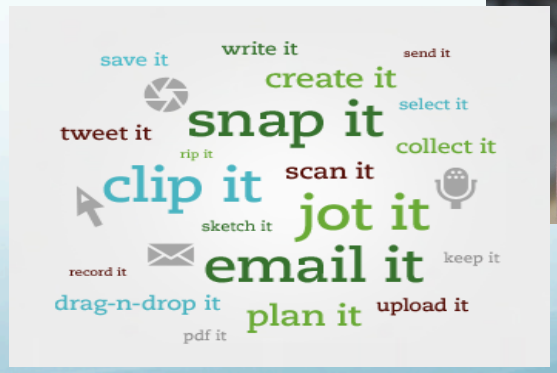
Technology assisted DA (Diagnostic Assessment)

- Dynamic & Meaningful
- Time & money saving
- Easy & Engaging
- Productive & manageable

Technology Criteria & Solution

- Easy to use, No cost
- Anytime, anywhere collect data
- Mobile
- Securely transfer data to individual folder
- A cross-platform app
- No hardware issues





Back supporting articles

“Classroom-based assessments that are used in formative ways may have shown to significant benefit student learning..” (Black & William, 1998).

“. Technology can support teacher's ability to build effective formative assessment” features into classroom practice (Quellmalz, 2015).

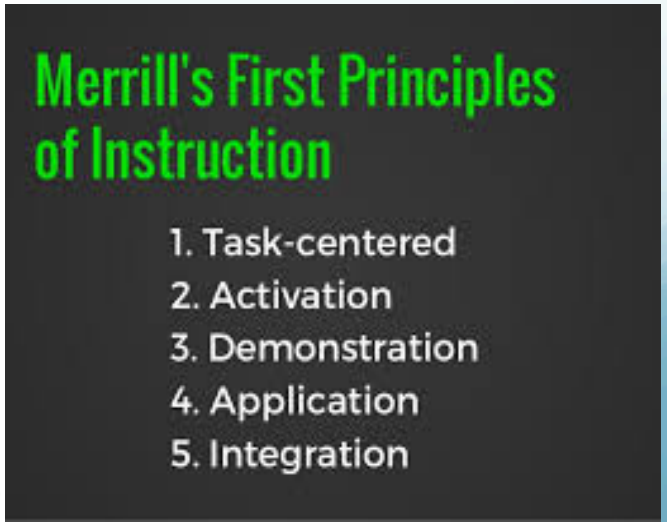
To **“take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff”**.(NETP 2010)

Purpose statement

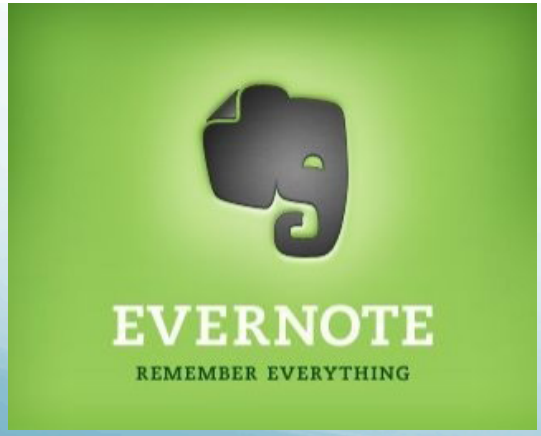
Develop and evaluate a web-based instructional module for military language instructors on Oahu on how to use the Evernote web application to collect students' language proficiency data and securely input and transfer them to individual student folders for diagnostic assessment

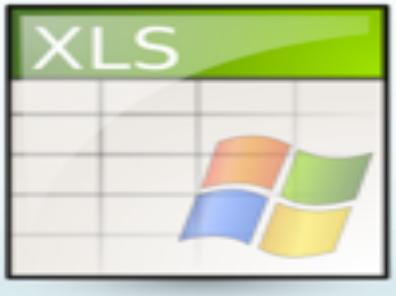
Design Theories

Design Considerations	Principles & Tools Implemented
• Frame work of design model	ADDIE model
• Instruction & feedback	Nine Events of Instruction (Gagne, 1992)
• Educational Theory	First principles of instruction (Merrill, 2013)
• Multiple inputs & representation	Universal Design Guidelines (UDL, 2008)
• Proper technology	Evernote
• Multimedia design Theory	Multimedia learning principles (Mayer, 2001)

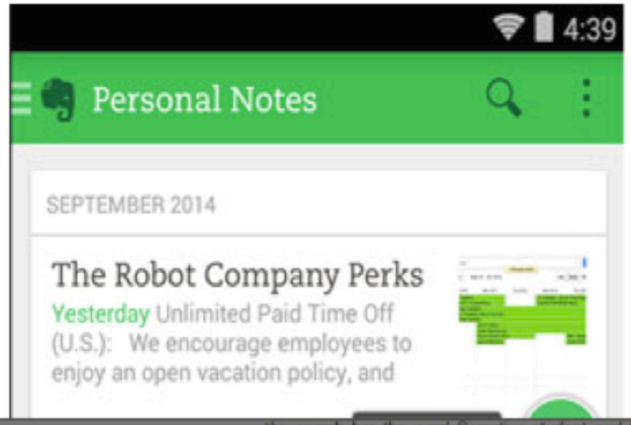


Technology & Tools





Step by step instruction with pictures, graphics, Youtube



Handwriting notes on Evernote

1. Turn on your phone.

2. Find the Evernote application and click on it to open.

3. Wait a few seconds for it to load.

4. Click the tiny **green +plus button (in the circle)** on the top right-hand corner to create a handwriting note.

5. Click in the body of the **Handwriting** (**a pen in the green circle**) to activate the handwriting functions.

6. Draw or handwrite what you want to note.

7. Click on "**green V check mark** button in the green circle " on top left corner of your smart phone screen. if you accept the handwriting note.

8. Hit the tiny "**done**" button in the top left-hand corner of the screen.

3. Methodology

Recruitment

- In-person, Announcement boards

  E-mail

Participants

- Target audience : 16

Military Training Center Faculty

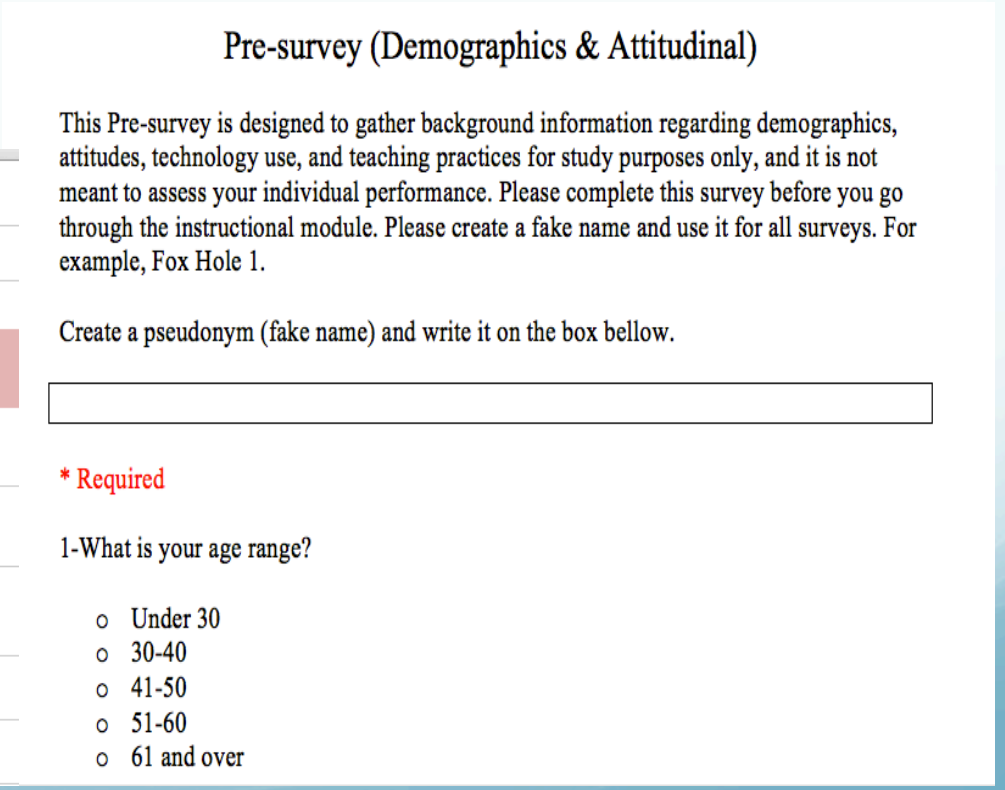
- 5 faculty were excluded
- Time: 1 week to finish all requirements

(Lesson: 1 hour ~ 1 and 1/2 hours

Data Analysis

- Comparison of Pre & Post survey responses
- Comfort levels, demographic information attitudes, skill levels, age and gender
- Post test responses

	2. What is your gender ?	3. Please specify your ethnicity ?	4. What is your highest education level ?
	male	Asian	Masters
	male	Asian	Masters
	male	Asian	Bachelors
	male	white caucasian	other
	male	white caucasian	ABD
	male	Asian	Masters
	male	Asian	Masters
	male	Asian	Bachelors



Pre-survey (Demographics & Attitudinal)

This Pre-survey is designed to gather background information regarding demographics, attitudes, technology use, and teaching practices for study purposes only, and it is not meant to assess your individual performance. Please complete this survey before you go through the instructional module. Please create a fake name and use it for all surveys. For example, Fox Hole 1.

Create a pseudonym (fake name) and write it on the box bellow.

* Required

1-What is your age range?

- Under 30
- 30-40
- 41-50
- 51-60
- 61 and over

4. Findings

Table 2. Participants' demographic information

Participant Age, Gender, Ethnicity and Education Level

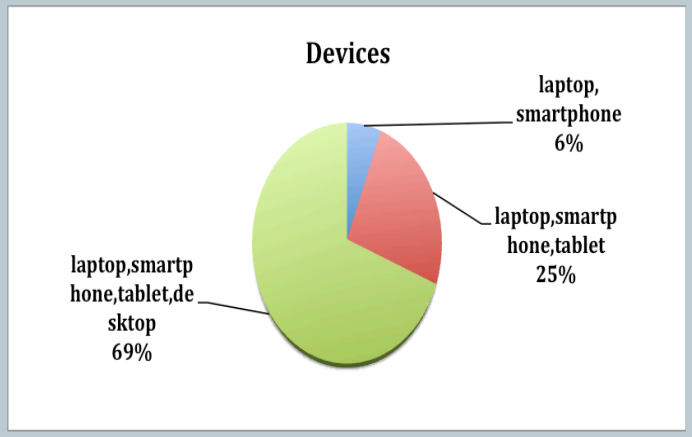
Characteristic	Number (Male/Female)	Percentage
Age		
30-40	7 (5/2)	44%
41-50	6 (2/4)	38%
51-60	2 (1/1)	12%
61 above	1 (1/0)	6%
Gender		
Male	9	56%
Female	7	44%
Civilian / Military	13/3	(81/19)%
Ethnicity		
Asian	14 (7/7)	88%
Caucasian	2 (2/0)	12%
Education Level		
Bachelors	1(1/0)	6%
Masters	10 (6/4)	63%
ABD	2 (1/1)	12%
Doctorate	2 (0/2)	12%
Other	1 (1/0)	6%

4.Findings

Results

Table 6. Attitude on Evernote usage for DA, Pre and Post survey comparison

Pre survey **Usage of Evernote**	
Heard about it, but I don't use it	10(63%)
Never heard about it	3(19%)
Sometimes use it (personal purpose)	2(13%)
Use it regularly (personal purpose)	1 (6%)
Use it for DA	0 (0%)



Pre survey **Evernote likeliness**	
Very unlikely or unlikely use it	6(38%)
Neutral	4(24%)
Likely use it	6(38%)

Post survey **Usage of Evernote**	
Will use Evernote for DA	9(56%)
Will use both Evernote & Traditional methods for DA	6(38%)
Will use the traditional method	1 (6%)

4. Finding

Results

Figure 2. Computer skill levels and Technology use in teaching

Levels	Number (Male/Female)	Percentage
Expert/Savvy	5(5/0)	31%
Average	11(4/)	69%
Technology Use in Teaching		
Very often	11(7/4)	69%
Often	3(1/2)	19%
Seldom	2(1/1)	12%

Technology comfort level of using technology in the classroom

	Pre survey	Post survey
Very comfortable	7(44%)	11(69%)
Somewhat comfortable	9(56%)	5(31%)

nder	C skill	Use technology	Comfort level	Belief in technology	Tec makes L mor
	Expert	Very Oft	Very Comp	Reshape	Strongly agree
	Average	Very Oft	Very Comp	Reshape	Strongly agree
	Expert	Very Oft	Somewhat	Reshape	Strongly agree
	Expert	Seldom	Very Comp	Some	Strongly agree
	Expert	Very Oft	Very Comp	Reshape	Strongly agree
	Averge	Very Oft	Somewhat	Some	Agree
	Average	Very Oft	Very Comp	Reshape	Strongly agree
	Average	Very Oft	Somewhat	Some	Strongly agree
	Expert	Very Oft	Somewhat	Reshape	Strongly agree
	Average	Seldom	Somewhat	Some	Agree
	Average	Very Oft	Somewhat	Reshape	Agree
	Average	Often	Somewhat	Reshape	Strongly agree
	Average	Very Oft	Somewhat	Some	Strongly agree
	Average	Vert Oft	Somewhat	Reshape	Strongly agree
	Average	Very Oft	Somewhat	Some	Strongly agree
	Average	Very Oft	Somewhat	Reshape	Agree

4. Findings Module feedback

Constructs	Average
Ease of Use	
Directions are easy to follow	4.5
Surveys/test are easy to fill out/ answer	4.6
Module was easy to use	4.5
Learning Quality	
The multimedia in the module was helpful for your learning	4.6
Module has helped me understand how to use Evernote	4.6
I feel more like knowledgeable about Evernote data collection system	4.5
How would you rate instructional content of the modules?	4.5
Engagement	
I felt that the learning module was engaging	4.5
The length of each section in the module was manageable	4.6
Web-based learning/ Technology used learning	
The use of technology made learning more interesting	4.5
Rate the web- based/ online learning	4.5

Likert scale

4. Finding

Results

Table 6. The challenges for the instructors to adopt new technologies

What is the most difficult challenge for instructors to adopt new technologies?

Factors

Category 1. Personal issues

- Time, money, enthusiasm, motivation, attitude, willingness, skills and openness to change.
- Take time from the busy teaching schedule, need time to practice and apply it to classroom.
- Not have enough time to absorb technology.
- Integration new technology into classroom practice.
- The ability of instructors to be in tune with current technological advances and maximizing their use in the classroom.

Category 2. Trainings, professional development

- Lack of professional development on technology.
- New technology implementation at work place without proper training to the staff or enough time given.
- Technological glitches while using those apps or tools.
- Keeping up with the fast-pacing tech changes.

Feedback on module

An open-ended question about after completing the module, how the participant feels regarding learning new information on the web-based module

Many positive comments & suggestions such as : Learning module is

- **Convenient, easy to follow,**
- **Useful, Effective, fast,**
- **Flexible, Very informative**
- **More interesting, time-saving**
- **Self- paced**
- **Easy to go back to find necessary information**
- **Takes to long, some of the pictures in the text- heavy portions were distraction and made the text hard to read**

4. Finding

- Age, years of teaching and education level didn't play key roles in the technology application in classroom and test results
- Gender plays some role in confidence and test results ; need more research
- 5 male instructors who claimed to be computer savvy and uses technology in the classroom often got higher scores on the post test
- Instructors' belief play key roles using technology in the classroom- Technology will reshape the future education

5. Conclusion

Summary

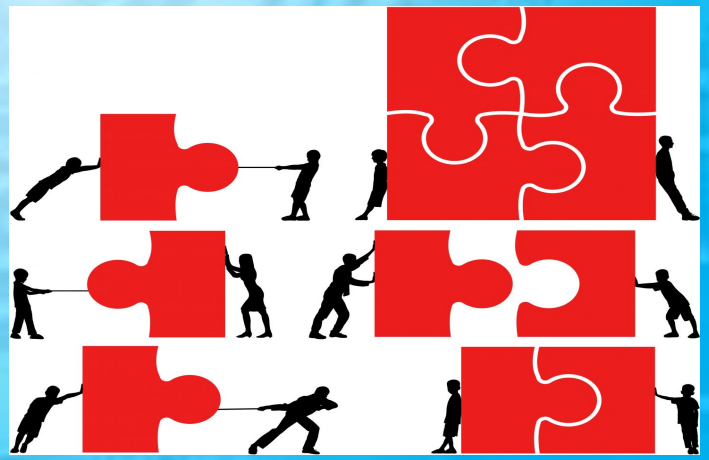
The learning module effectiveness :

- **Likert scale : 4.5**
- **Post test - Average score 87.8%**
- **Likeliness of Evernote use for DA (38%=>94%)**

Improved faculty's technology skills, comfort level (44%=>69%)

Improved faculty's attitude of using & adapting technology (LS 4.6)

The chosen theories were applicable



Concerns

Concerns

Different location of Evernote features –

Androids vs. iPhones

Visual note-camera

- Security awareness – No pictures of MTC in & outside of building , classroom, students' face, instructor's face, personal information: rank, services, affiliation, etc.

Future plans

Follow - up research :

- **Implementing Evernote for DA**
- **Checking the effectiveness of Evernote for DA**

Provide professional development training

- **Provide synchronous workshops- Blackboard collaborate**

Make an Evernote user guide for security concerns

Questions and Answers

Any questions ?

My email address is jayka@hawaii.edu

Mahalo Nui Loa !

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