TALKING IS THE NEW TYPING  
-APPLE

CHALLENGING SMARTPHONE USERS TO DICTATE INSTEAD OF TYPE IN ORDER TO ENRICH THE MOBILE LEARNING EXPERIENCE
THE STORY OF A MOBILE-BASED MODULE
THE STORY OF
A MOBILE-BASED MODULE

ANALYSIS
THE STORY OF A MOBILE-BASED MODULE

A - ANALYSIS
D - DESIGN
THE STORY OF A MOBILE-BASED MODULE

A - ANALYSIS
D - DESIGN
D - DEVELOPMENT
THE STORY OF
A MOBILE-BASED MODULE

A  ANALYSIS
D  DESIGN
D  DEVELOPMENT
I  IMPLEMENTATION
THE STORY OF
A MOBILE-BASED MODULE

A ANALYSIS
D DESIGN
D DEVELOPMENT
I IMPLEMENTATION
E EVALUATION
WHICH SMARTPHONE DO YOU USE?

Poll Options:
Under Participants Panel

A. iPHONE
B. ANDROID
C. OTHER
D. NONE
E. I DON’T KNOW
WHY THIS STUDY?

SMARTPHONE
WHY THIS STUDY?

54.9%

US SMARTPHONE OWNER
Q2 2012 (Nielsen)
WHY THIS STUDY?

1993

2013
WHY THIS STUDY?

1 billion
Global annual smartphone sales 2016 (IMS Research)

2 Smaller, smarter
Smartphone watches (Apple, Sony)

3 Hands-free
Augmented Reality (Google, Apple)
WHY THIS STUDY?

ONLINE LEARNING

- 6 million students online
- Online Courses
- Blackboard Mobile
- Learning on-the-go

MOBILE LEARNING
WHY THIS STUDY?

1. SMARTPHONE

WHERE'S THE KEYPAD!

2. ONLINE LEARNING

SPEAKING AND WRITING?

3. M-LEARNING

EFFECTIVE LEARNING?

Hi dr leong Here's my hw. Tnx and ttyl!
WHICH SPEECH-TO-TEXT TOOL DO YOU USE?

A. APPLE’S DICTATION
B. DRAGON DICTATION
C. BOTH
D. OTHER
E. NONE
ANALYSIS
A D D I E

ANALYSIS

1 WEEK 2 WEEKS 3 WEEKS 4 WEEKS 5 WEEKS 6 WEEKS

1 ETEC DEPARTMENT

2 IPHONE

3 INTEREST
- DICTATION
- TRY OUT NEW APP
- MOBILE INSTRUCTION
- WANT A CHALLENGE!

4 ATTITUDINAL OUTCOME

POSITIVE ATTITUDE

ATTITUDE
The purpose of this research study is to develop and evaluate a mobile based module to instruct smartphone users on how to dictate instead of type.
DESIGN
DEVELOPMENT
1 TOOLS

- GRAPHICS
- PHOTOSHOP
- ICONS

- SURVEYS
- PINNION
- POLLDADDY

www.PINNION.COM

PRE SURVEY

According to the 3 main learning styles, what type of learning style best describes you?

Please select 1 more item:
- Auditory Learners: Hear
- Visual Learners: See
- Kinesthetic Learners: Touch
- I don't know
- Other

www.POLLDADDY.COM

3 SURVEY

Complete this survey:

If the survey doesn't load, refresh (↻) the browser window.

About how many errors did you have to correct? *

- None! It was perfect!
- 1
- 2
- 3
1. **TOOLS**
   - GRAPhICS
   - PHOTOSHOP
   - ICONS
   - SURVEYS
   - PINNION
   - POLLDADDY

2. **CREATE**
   - HTML EDITOR
   - NOTEPAD
   - UH SERVER
     http://tinyurl.com/s2tmodule

www.NOTEPAD-PLUS-PLUS.ORG
1. **Tools**
   - Graphics
   - Photoshop
   - Icons
   - Surveys
   - Pinnion
   - PollDaddy

2. **Create**
   - HTML Editor
   - Notepad
   - UH Server
     - http://tinyurl.com/s2tmodule

3. **Evaluate**
   - 1-on-1
   - Critical Friends Group
   - Subject Matter Expert
**DEVELOPMENT**

1. **TOOLS**
   - Graphics
   - Photoshop
   - Icons
   - Surveys
   - Pinnion
   - PollDaddy

2. **CREATE**
   - HTML Editor
   - Notepad
   - Uh Server
     - http://tinyurl.com/s2tmodule

3. **Evaluate**
   - 1-on-1
   - Critical Friends Group
   - Subject Matter Expert

**REVISED EVALUATION**
IMPLEMENTATION

MAIN PAGE

1. REQUIREMENTS
2. ABOUT
3. START
When you see the “Recording...” screen, you will slowly and clearly say:

"Hello, I am trying out the effectiveness of a speech to text app called Dragon Dictation."
RECAPS

1. RECAPS
2. MEMORY
3. EMBEDDED SURVEYS

IMPLEMENTATION
DRAGON DICTATION CHALLENGE

ICEBREAKER

OVERVIEW
In this challenge, you will choose a character you would like to introduce.

GOAL
Your goal is to successfully record, edit, copy, and paste a 1 paragraph dictation into another textbox.

REFLECTION

OVERVIEW
In this challenge, you will give a reflection on a certain point of view your character strongly believes in.

GOAL
Your goal is to successfully record, edit, copy, and paste 2 paragraphs dictation into another textbox.

FEEDBACK

OVERVIEW
In this challenge, you will provide an encouraging comment, a suggestion, and a question for your character.

GOAL
Your goal is to successfully record, edit, copy, and paste a 1 paragraph dictation into another textbox.
ICEBREAKER CHALLENGE

1. INTRODUCTION TO A FAVORITE CHARACTER

2. RECORD, EDIT, COPY, PASTE

3. 1 PARAGRAPH
1. **Point of View of Character**

2. **Record, Edit, Copy, Paste**

3. **2 Paragraphs**

**Reflection Challenge**

**Overview**
In this challenge, you will give a reflection on a certain point of view your character strongly believes in.

**Goal**
Your goal is to successfully record, edit, copy, and paste 2 paragraphs dictation into another textbox.
FEEDBACK CHALLENGE

1. Encouragement Questions Suggestions

2. Record, Edit, Copy, Paste

3. 1 Paragraph

OVERVIEW
In this challenge, you will provide an encouraging comment, a suggestion, and a question for your character.

GOAL
Your goal is to successfully record, edit, copy, and paste a 1 paragraph dictation into another textbox.
EVALUATION
PRE-SURVEY

21 PARTICIPANTS

57% 43%
PRE-SURVEY

AGE RANK

33% 19% 19% 19% 10%

22-25 26-30 31-40 41-50 51-60

57% 43%

21 PARTICIPANTS
57% VISUAL

53%
- Introvert
- Extrovert
- Don’t Know

21 PARTICIPANTS
- 57% Male
- 43% Female

AGE RANGE
- 33% 41-50
“I would like to introduce to you the Buddha. His real name is Siddhartha Gotama. He was born in Lumbini, Nepal. His favorite things to do are to meditate and teach the dharma to anyone who is openhearted and willing to learn and listen.

The dharma is a set of teachings that explain a middle path. This means that people may lead a balanced life between living in the material world and a world where you have internal peace in your heart.”

“He is the caped crusader, the dark knight, and the world’s greatest detective. He is also a billionaire philanthropist, head of a multinational corporation, and adoptive father. He is vengeance, he is the night, he is Batman.”
**Module Attitude**

1 = STRONGLY DISAGREE | 5 = STRONGLY AGREE

- This module was useful: 4.5
- The module flowed in a logical manner: 4.6
- The module length was manageable: 4.1
- The record, edit, copy/paste activities were helpful: 4.6
- I liked the Icebreaker, Reflection, and Feedback Challenges: 4.6
- I liked learning from my mobile device: 4.3
- I liked the visual nature of the pre-survey: 4.4
- This module was entertaining: 4.2
- This module was easy to read: 4.6
- This module was easy to navigate: 4.5
- This module was easy to understand: 4.7

**Speech-to-Text Attitude**

- Would use speech-to-text for assignments on device: 3.9
- Speech-to-text beneficial for lengthy text input: 4.3
- More motivated to use speech-to-text tools in future: 4.1
- Speech-to-text can help with oral communications/ thought: 4.1
- More confident speaking instead of typing on device: 4.1
- More comfortable with a speech-to-text app: 4.6
POST-SURVEY

Benefits of S2T instead of keypad: 3.5
Motivated to use S2T in future: 1.9
Confident w/ dictating over typing: 3.3
**POST-SURVEY**

<table>
<thead>
<tr>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NEUTRAL</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Survey Results:**

- **Benefits of S2T instead of keypad.**
  - Pre-Survey: 4.3
  - Post-Survey: 4.1

- **Motivated to use S2T in future.**
  - Pre-Survey: 3.5
  - Post-Survey: 3.3

- **Confident w/ dictating over typing.**
  - Pre-Survey: 1.9
  - Post-Survey: 4.1
WHAT WENT WELL
WHAT WENT WELL

NAVIGATION

POST-SURVEY

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logical Flow</td>
<td>4.6</td>
</tr>
<tr>
<td>Easy to Read</td>
<td>4.6</td>
</tr>
<tr>
<td>Easy to Navigate</td>
<td>4.5</td>
</tr>
<tr>
<td>Easy to Understand</td>
<td>4.7</td>
</tr>
</tbody>
</table>

1 = STRONGLY DISAGREE  5 = STRONGLY AGREE
The examples and just the overall layout of the module was well-done, professional, aesthetically pleasing and easy to navigate in a linear fashion. I did not feel lost at any point.
**WHAT WENT WELL**

1. **NAVIGATION**

2. **ATTITUDE**

   - Benefits of S2T instead of keypad: 4.3 (Pre-Survey) 4.1 (Post-Survey)
   - Motivated to use S2T in future: 3.5 (Pre-Survey) 1.9 (Post-Survey) 4.1 (Pre-Survey) 4.1 (Post-Survey)
   - Confident w/ dictating over typing: 3.3 (Pre-Survey)
WHAT DID YOU REALLY LIKE ABOUT THE MODULE AND WHAT CAN BE IMPROVED?

**NAVIGATION**

“The examples and just the overall layout of the module was well-done, professional, aesthetically pleasing and easy to navigate in a linear fashion. I did not feel lost at any point. On my Iphone 5, after clicking the buttons for my answers in the surveys, the screen would bounce up to the beginning of the survey each time. My answers would be marked but it felt like some kind of refresh, that wasn't necessary. Not a big deal because I can scroll down to the next or continue button. I would keep it the way it is! I have no thoughts for improvement.”

**ATTITUDE**

“I had a lot of fun doing your module! At first I was daunted by how much I had to do and I was wanted to give up but I kept goin and I realize that the module was easier than I thought. I would have never imagined writing more than one sentence on an ipad before I did your module. Great job! I can't tell you how much I enjoyed doing your module. But they were really great examplmes and they were Star Wars related so that was a lot of fun. You really were creative and it was impressive to see your creativity at work.”

**MOTIVATION**

“The examples and just the overall layout of the module was well-done, professional, aesthetically pleasing and easy to navigate in a linear fashion. I did not feel lost at any point. On my Iphone 5, after clicking the buttons for my answers in the surveys, the screen would bounce up to the beginning of the survey each time. My answers would be marked but it felt like some kind of refresh, that wasn't necessary. Not a big deal because I can scroll down to the next or continue button. I would keep it the way it is! I have no thoughts for improvement.”
WHAT WENT WELL

1 NAVIGATION
2 ATTITUDE
3 MOTIVATION

QUESTION:
WHAT DID YOU REALLY LIKE ABOUT THE MODULE AND WHAT CAN BE IMPROVED?

“

“The examples and just the overall layout of the module was well-done, professional, aesthetically pleasing and easy to navigate in a linear fashion. I did not feel lost at any point. On my Iphone 5, after clicking the buttons for my answers in the surveys, the screen would bounce up to the beginning of the survey each time. My answers would be marked but it felt like some kind of refresh, that wasn't necessary. Not a big deal because i can scroll down to the next or continue button. I would keep it the way it is! I have no thoughts for improvement.”

“The visual structure and easy flow less directions”
“Interesting Star Wars examples. Made it fun.”

“The organization and flow of the module. It was consistent and very well organized”

“I realize that dictation is not as intimidating as I thought. Shows how simple it is to edit and copy.”

“Tips on recording pause and recording. That was very helpful”

“The examples and just the overall layout of the module was well-done, professional, aesthetically pleasing and easy to navigate in a linear fashion.”

“As someone who never used speech to text, I think I will now and start using Siri and other similar apps.”
<table>
<thead>
<tr>
<th>WHAT WAS HELPFUL?</th>
<th>WHAT DID THEY LIKE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ORGANIZATION</td>
<td>• ENTERTAINING / MOTIVATING</td>
</tr>
<tr>
<td>• ACTIVITIES / EXAMPLES</td>
<td>• STAR WARS EXAMPLES</td>
</tr>
<tr>
<td>• CLEAR INSTRUCTION</td>
<td>• VISUALS AND TUTORIALS</td>
</tr>
<tr>
<td>• LOGICAL NAVIGATION</td>
<td>• LAYOUT AND ORGANIZATION</td>
</tr>
</tbody>
</table>
IMPROVEMENTS
PARTICIPANT

“Had to tap twice when starting to take survey's.

IMPROVEMENTS

1. TECHNICAL ISSUES

- PINNION

- PINNION
1 TECHNICAL ISSUES

- POLLDADDY

"The paste feature in the survey did not work."

"After clicking the buttons for my answers in the surveys, the screen would bounce up to the beginning of the survey each time. My answers would be marked but it felt like some kind of refresh, that wasn't necessary."
“I would consolidate the edit instructions to one big lesson.”

“Hard to do the multiple paragraphs work the first time.”

“For the older learners it may be challenging to read a lot of text instructions.”

“Maybe less repetition of directions”

“Send an actual text or email to someone?”

“The assignment for the paragraphs was a good challenge but took a little longer due to coming up with a character and all that information.”
IMPROVEMENTS?

- TECHNICAL ISSUES OF SURVEY TOOLS
- LENGTH
- LESS WORDS/DIRECTIONS
- ADD AUDIO FOR VISUAL IMPAIRED
- DAUNTING AT FIRST IMPRESSION
<table>
<thead>
<tr>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Bigger Fonts</td>
</tr>
<tr>
<td>• Consolidate Information</td>
</tr>
<tr>
<td>• Alternative Mobile Survey Tool</td>
</tr>
<tr>
<td>• Disability Access</td>
</tr>
<tr>
<td>• Bigger Participant Pool</td>
</tr>
</tbody>
</table>
• BIGGER FONTS
• CONSOLIDATE INFORMATION
• ALTERNATIVE MOBILE SURVEY TOOL
• DISABILITY ACCESS
• BIGGER PARTICIPANT POOL
**RECOMMENDATIONS**

- BIGGER FONTS
- CONSOLIDATE INFORMATION
- ALTERNATIVE MOBILE SURVEY TOOL
- DISABILITY ACCESS
- BIGGER PARTICIPANT POOL
• BIGGER FONTS
• CONSOLIDATE INFORMATION
• ALTERNATIVE MOBILE SURVEY TOOL
• DISABILITY ACCESS
• BIGGER PARTICIPANT POOL
RECOMMENDATIONS

- BIGGER FONTS
- CONSOLIDATE INFORMATION
- ALTERNATIVE MOBILE SURVEY TOOL
- DISABILITY ACCESS
- BIGGER PARTICIPANT POOL
THANK YOU
Dr. Peter Leong
Dr. Curtis Ho
Dr. Bert Kimura
Prof. Mary Hattori
Frank Jumawan
CFG: Helen, Mia, Amy
ETEC Cohort, Department
TCC Group