Usability Testing / Design Validation

New Interaction Types (China)

Report Prepared By: Yao Jia

Report Date: 23 July 2018

Research Topic: Design Validation - New Interaction Types (China)

Metadata	Metadata Input
Research Tagline	New Interaction Types Design Validation (China)
Research Activity Purpose	The purpose of this study is to collect students' feedback on new interactions types about understanding the requirement, behaving the inter-activity, getting their desired feedback etc. ● General conception about imbedding ASR into IAP and two new interaction types - Repeat & practice, Read & record ● Insights into new interactions about affordance, behaving requirements and desired feedback ● Other comments and suggestions about Pronounce and Practice parts in IAP exercise
Audience	We have conducted the study with 11 participants (9 students and 2 staff) from SH12, SH13
Research References	As a designer, I want to help students better perform on these new interaction types
Expected Timeframe	July 20 to July 22, 2018
Platforms	Interactive prototypes with InVision On Windows laptop and iPad pro
Key Performance Metrics	Validate the user is able to understand the key information conveyed and the purpose of utilizing ASR Validate the user can build the connection between current Pronounce and Practice with new interaction types Validate the user can understand what are the requirements and how to complete tasks based on requirements Validate the user is able to identify the main flow of answering questions The study will also provide us with: **Metrics:** Objective and behavioral performance data that provides a usability baseline to measure future improvements

	Audience insights: Actionable insights on how to optimize the user experience for our students **Actionable improvements:** Concrete recommendations for improvements based on research findings.
Research Geography	China
Research Requested by	Vignesh Gnanasekaran, Asif Mohamed
Team Members & Collaborators	**Researcher / Facilitator**: Yao Jia **Designer**: Vignesh Gnanasekaran, Asif Mohamed **Observer**: Remeshan S Madhavan
Design Tools / UX Methods Proposed	InVision Prototypes, Zeplin Design validation / task testings
Major Tasks & Responsibilities	**Yao** (UX Researcher) will facilitate the interview, ask questions and take notes
Digital Recording	No
Research Execution	Randomly pick students from speaking center in SH12 and SH13; SA help to schedule student interviews
Report Compiled by	Yao Jia
Research Compilation Date	23 July 2018

Participants			
Name	**Gender**	**Current level**	**Title / Role**
Amy	F	6	Student
Nana	F	4	Student
Delia	F	3	Student
Sherry	F	8	Student
John	M	1	Student

Leaf	M	2	Student
Yolanda	F	19	Student
John	M	8	Student
Freya	F	N/A	Study Advisor
James	M	8	Student
Linda	F	N/A	Study Advisor

Success Criteria for Scoring Scenarios	
The chart below outlines success criteria that will be used for scoring the success of task completion as our test participants try to complete the scenarios. Scoring each scenario will enable us to calculate a rate of successful task completion for each scenario at the end of the test.	
Success	**Completes the task with minimal effort (must include all of the following)**
	● Reaches destination within 2 attempts
	● Does not receive hints from the facilitator
	● Does not ask for help
	● Does not encounter error messages
	● Does not mention frustration
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Partial Success	**Completes the task with moderate effort (can include any of the following)**
	● Reaches destination within 3 attempts
	● Receives 1 hint from the facilitator
	● Encounters 1 or 2 error messages
	● Has to back up or reenter information

	● Mentions minor frustration or expresses minor confusion
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Failure	**Can include any of the following:**
	● Does not complete the task or completes the task with considerable effort
	● Reaches destination in 4 or more attempts
	● Receives 2 or more hints from the facilitator
	● Encounters more than 2 error messages or same error message more than once
	● Has to back up or re-enter information several times
	● Mentions serious frustration or confusion
	● Mentions they would have to call or speak with someone to complete the task
	● Concludes the task is completed successfully, when it is not.
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Skip	Task was skipped due to time constraints or because the task was not meant for a particular user type

Repeat & Practice - Version 1

Pain points:	1. Only 2/11 read the requirement before the question 2. If not being told with the use of ASR, students can get really confused about the question type: listen and fill the sentence? Match the sentence with the picture?

Repeat & Practice - Version 1

Repeat & Practice

1.Listen, 2.Repeat, 3.Practice

Could you stay _ _ _ _ ?

Click to listen again

← 1 2 **3** 4 5 →

Click to Record

Pain points:	1. The bubble is obvious enough while students still prefer to click on a button-like thing instead of somewhere vague 2. 1 student in level one who is 62 years old said, the **font size** of bubble text is too small for him

Repeat & Practice - Version 1

Pain points:	1. 4/11 didn't understand correctly about the color; they thought it's **colorize differently** because of intonation or stress 2. More tips for pronunciation such as how to liaise 3. 1 student and 1 SA thought this step is for showing the missing part of the sentence 4. 8/11 users prefer seeing the **complete sentence** (in the current Pronounce, they also see incomplete ones)

Repeat & Practice - Version 1

Pain points:	1. **"What does this button play?"** 11/11 students and SAs had the same question 2. 4 students asked whether they can listen to only those words' pronunciations 3. 1 SA wanted to listen only what she had speeched and all other 10 would like to listen **both the original and the recorded** to make a comparison 4. The enabled **reply button** is not clear enough while all students and staffs would retry a few more times if they think the first time pronunciation is not good enough

Repeat & Practice - Version 1

Repeat & Practice

1.Listen, 2.Repeat, 3.Practice

⊖ Could you stay _ _ _ _ ?

←   1   2   **3**   4   5   →
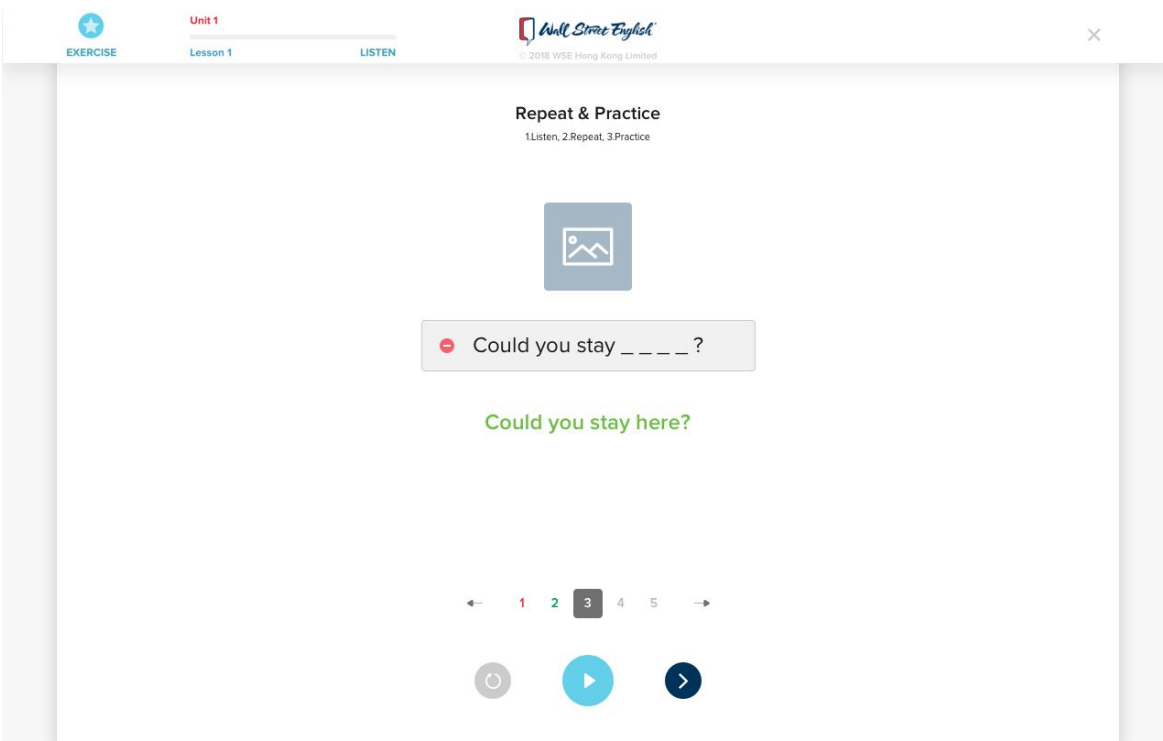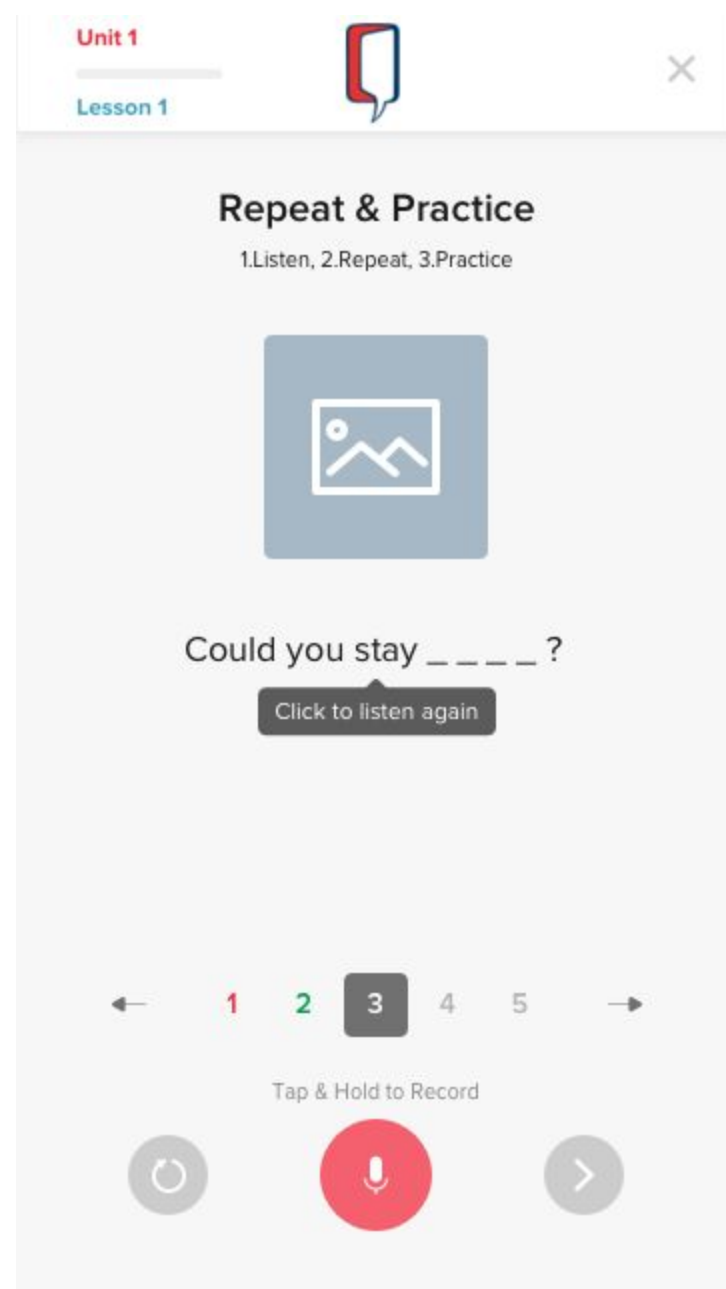
Click to Listen

↻   ▶   ›

Pain points:	1. 4/11 were familiar with this hide option 2. For higher level students with more difficult sentences, they would use this hide option to "challenge" themselves for listening skills; but for easy content, they won't

Repeat & Practice - Version 1

Pain points:	1. The same question here: **what does this button play** 2. If students pronounce all good, they won't retry, so the disabled retry button is alright 3. 4 students clicked the **"play" button to continue** because they didn't notice there was a separate button for that
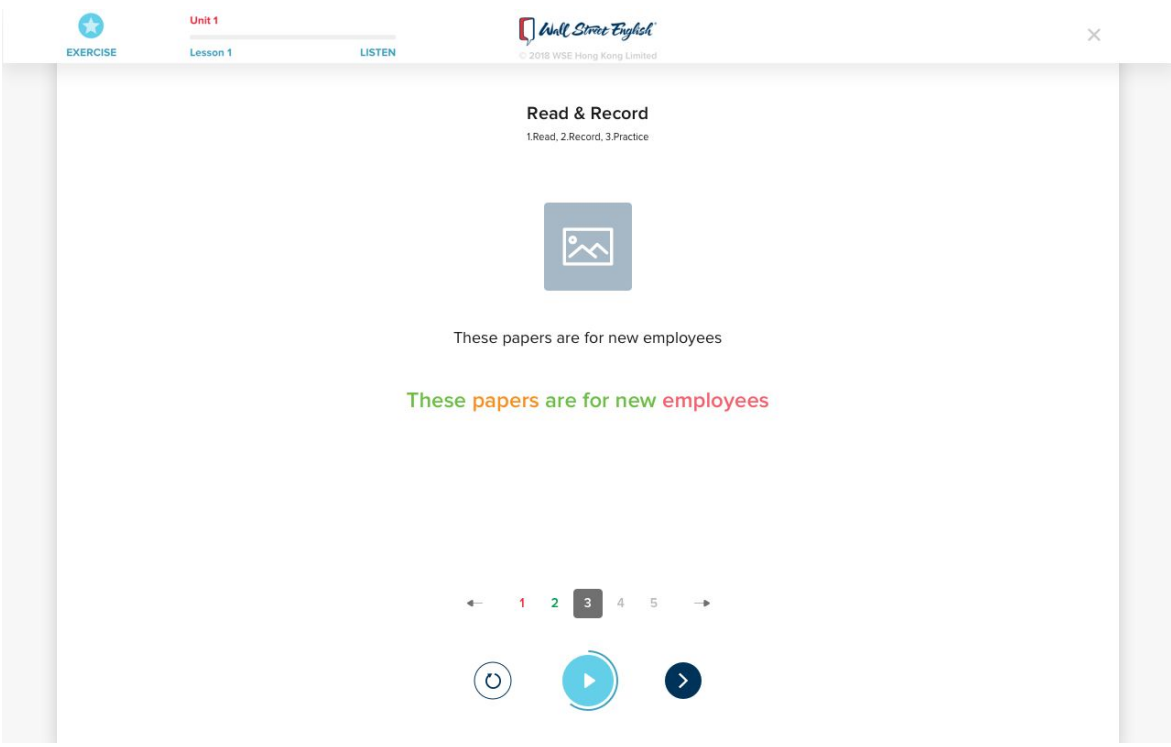
Repeat & Practice - Version 1 (Mobile)

Unit 1

Lesson 1

Repeat & Practice
1.Listen, 2.Repeat, 3.Practice

Could you stay _ _ _ _ ?

Click to listen again

←   1   2   3   4   5   →

Tap & Hold to Record

Pain points:	1. 3/11 didn't notice the "**hold**" here, but they all agreed that hold to record on phones and tablets is easy to do

Read & Record - Version 1

Read & Record

1.Read, 2.Record, 3.Practice

These papers are for new employees

These papers are for new employees

←   1   2   **3**   4   5   →

Pain points:	1. Again, that question, "**what does this button play**" "**I want to listen both for a comparison**"

Repeat & Practice - Version 2

Pain points:	1. Listen and record buttons are placed just like the current layout, which looks familiar to students 2. **No color change** after playing so how many times can it be clicked and replayed?

Repeat & Practice - Version 2

Pain points:	1. **What to listen** after "click to listen"? 2. **Two play buttons** next to the picture are clickable or not? 3. If not, then how to play the original listening?

Read & Record - Version 2

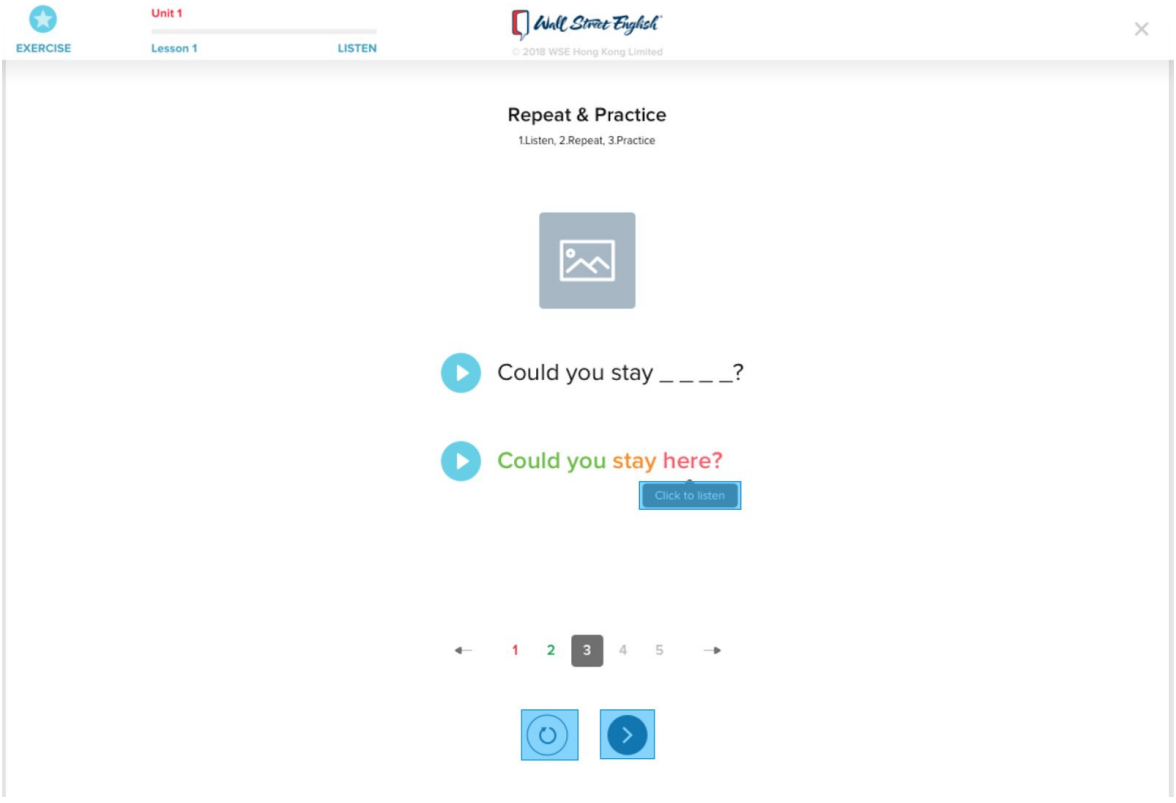| **Pain points:**	1. All students showed with this prototype questioned "how can I listen to **the right pronunciation and what I recorded**" 2. They assumed the dark blue played what he/she pronounced

Read & Record - Version 2

Pain points:	1. Most students were **confused with the coloring** of retry and next buttons, what caused them changing green or blue

Executive Summary
Keep two play buttons, one for the original and one for what the student pronounced, so students can do comparisons
Make color changing consistent
Listen - talk - relisten - retalk…make the retry also a complete process of exercise
Provide clear bubble texts, with font size big and distinguishing enough
Provide color explanation, especially for colors in ASR results
Provide the option of displaying the missing text or not
For those new words' wrong pronunciations, provide detail explanation and tips

Other Notes
All students and staff being interviewed are quite excited with imbedding ASR with IAP
For the missing content (target language) in sentence, some students will just skip and not pronounce those parts if they don't know
"Hide" option is more for high level students
On APPs, new prototypes are with higher satisfaction than current interaction types

MOST UPDATED DESIGNS

Repeat & Practice - Version 3
Page link - Mobile **Page link- Desktop**

Pain points:	1. Screen size is too big so call-to-action buttons are somehow hidden below 2. "Click to listen" to the word or the sentence? Need rewording here 3. Confusions about building the connection between the sentence and the picture 4. Detailed explanation about color differentiations is needed

Read & Record - Version 3

Pain points:	1. No bubble text for "click to listen" 2. Confusions about building the connection between the sentence and the picture 3. Play button is supposed to play both the model and students' recordings, but for specific words