

Identifying the English Language Skills Required by Non-native English Speaking Pilot Trainees during Flight Training

~ Needs Analysis and Its Implications for Training Future Generations ~

Megumi Nishikawa¹

Yoshinao Nawata²

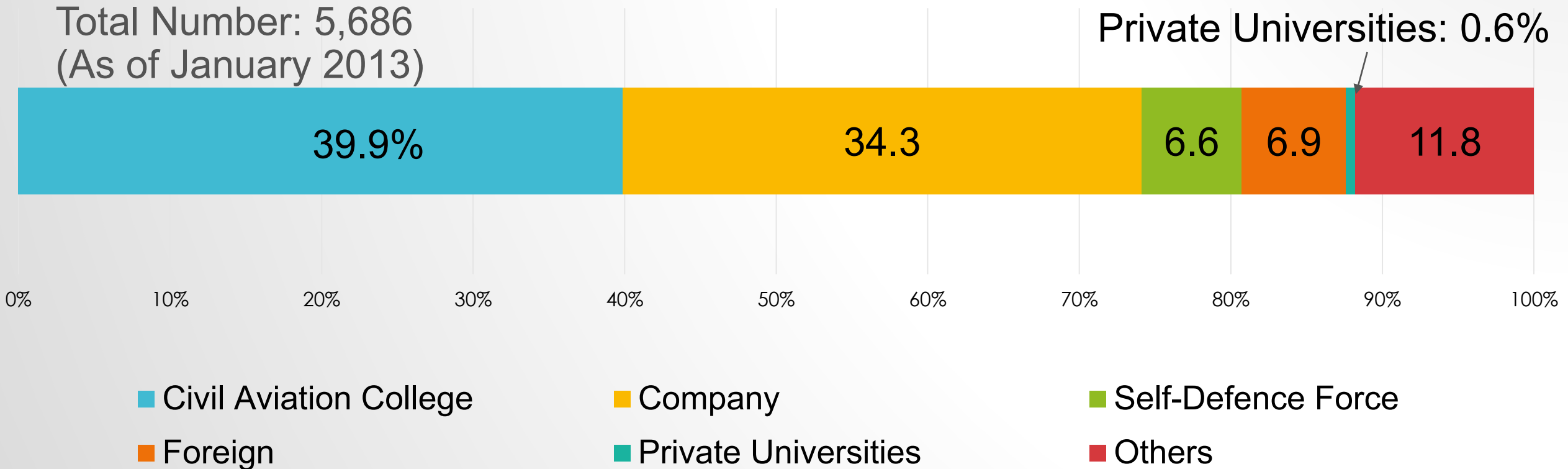
Tokai University¹

Civil Aviation College²

Outline

- Growth in aviation worldwide
- Pilot shortage and how it affects pilot training
- Changes in pilot training and its impact on the language training needs of new pilots
- Case in Japan: Japan Civil Aviation College
- Case in Japan: Private universities
- English language skills required by non-native English-speaking pilot trainees during flight training
- Implications for training future generations

Pilot shortage and how it affects pilot training



Ministry of Land, Infrastructure, Transportation, and Tourism (2014)

Pilot shortage and how it affects pilot training

- Location
- Instructors
- Medium of instruction
- Language skills
- Intercultural competence

Pilot Training Case in Japan: Civil Aviation College

- Miyazaki Campus (Miyazaki)
- Obihiro Campus (Hokkaido)
- Sendai Campus (Miyagi)
- Age
- After finishing 2 years of college
- 24-month (2-year) course
- 202 hours of flight training

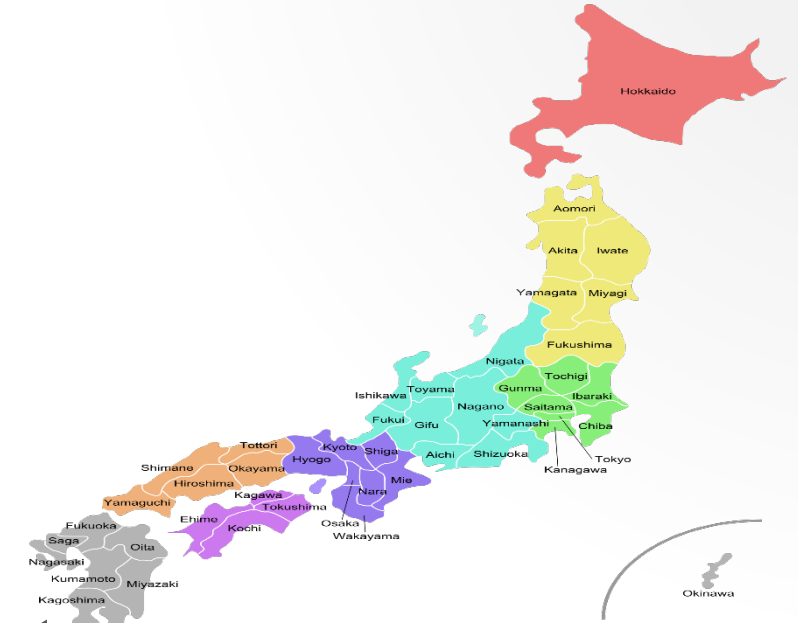


Pilot Training Case in Japan: Civil Aviation College

- Location: Japan
- Instructors: Japanese, experienced
- Medium of instruction: Japanese
- Intercultural competence

Pilot Training Case in Japan: Private Universities

- Tokai University
- Private university (7 campuses)
- 28,209 students
- 19 departments, 75 courses
- School of Engineering (6,016 students)
- Course of Aviation, Department of Aeronautics and Astronautics (197 students)
- Age



(as of May 2018)

https://www.tokai.ac.jp/about/number/num_student/

Pilot Training Case in Japan: Private Universities

- University of North Dakota (UND)
- Department of Aviation at the John D. Odegard School of Aerospace
- Dean
- Chief Flight Instructor
- Assistant Chief Flight Instructors
- Instructors
- Aerospace Foundation

www.eo.u-tokai.ac.jp/etc/28_航空操縦学専攻.pdf

(as of May 2018)

aviation.und.edu

Pilot Training Case in Japan: Private Universities

- TOEFL® (iBT) 69 (as of 2018)
- GPA 2.5 minimum
- Aeronautical radio operator
- Commercial pilot license
- Instrument flight certificate

www.eo.u-tokai.ac.jp/etc/28_航空操縦学専攻.pdf

TOEFL® (iBT)

- administered via the internet
- measures your ability to use and understand English at the university level
- evaluates how well you combine your reading, listening, speaking and writing skills to perform academic tasks
- prepares you for the academic English requirements of a university
- test questions combine reading, listening, speaking and writing skills just as in an academic classroom

TOEFL® (iBT)

- Reading Section (Score of: 0-30)
- Listening Section (Score of: 0-30)
- Speaking Section (Score of: 0-30)
- Writing Section (Score of: 0-30)
- Total Score (0-120)

<https://www.ets.org/toefl/ibt/scores/>

Pilot Training Case in Japan: Tokai University

- Location: Grand Forks, North Dakota State, U.S.A
- Trainees: Non-native speakers of English (mainly Japanese)
- Instructors: mainly American
- Medium of instruction: American English
- Intercultural competence

Pilot Training Case in Japan

	Civil Aviation College	Tokai University
Location	Japan	USA
Trainees	Japanese	Mainly Japanese
Instructors	Japanese	Mainly American
	Experienced	Young
Medium of instruction	Japanese	English

English language skills required by non-native English-speaking pilot trainees during flight training

Survey on non-native English-speaking pilot trainees' use of English

- ◆ Context
- ◆ Language
- ◆ Instructors
- ◆ Housing
- ◆ Flight training
- ◆ Ground school

English language skills required by non-native English-speaking pilot trainees during flight training

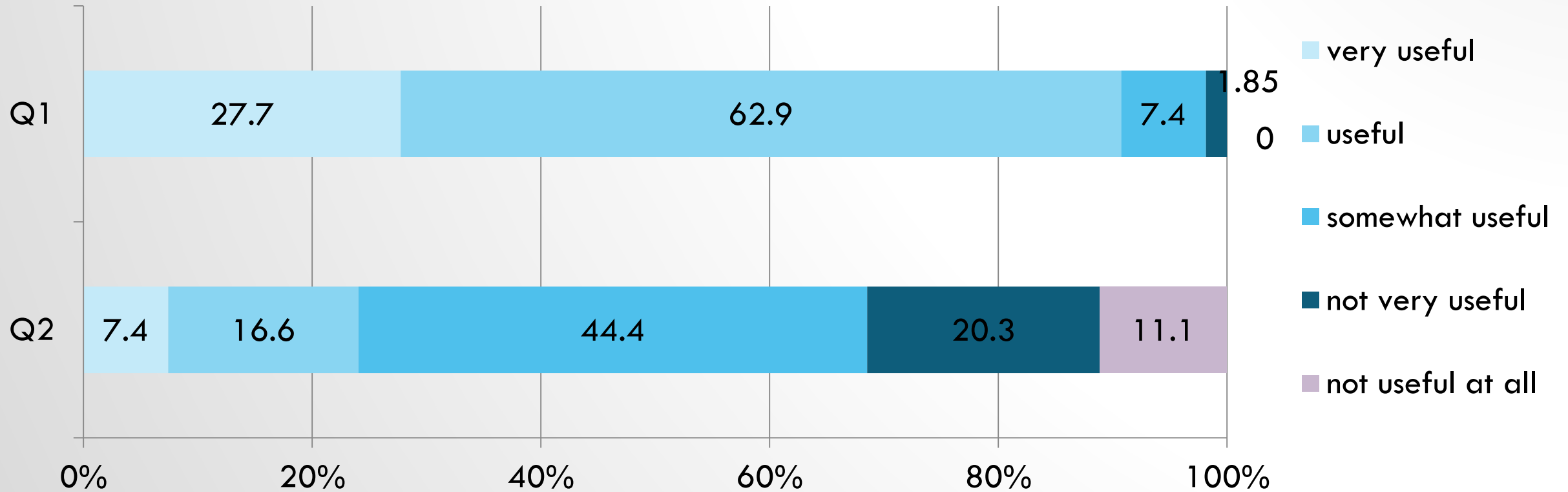
Survey on non-native English-speaking pilot trainees' use of English

- ◆ Purpose
- ◆ Participants
- ◆ Materials
- ◆ Procedures

Trainees' use of English ~survey results~

Q1. How useful were the intensive TOEFL preparation classes overall for you in terms of achieving your TOEFL score?

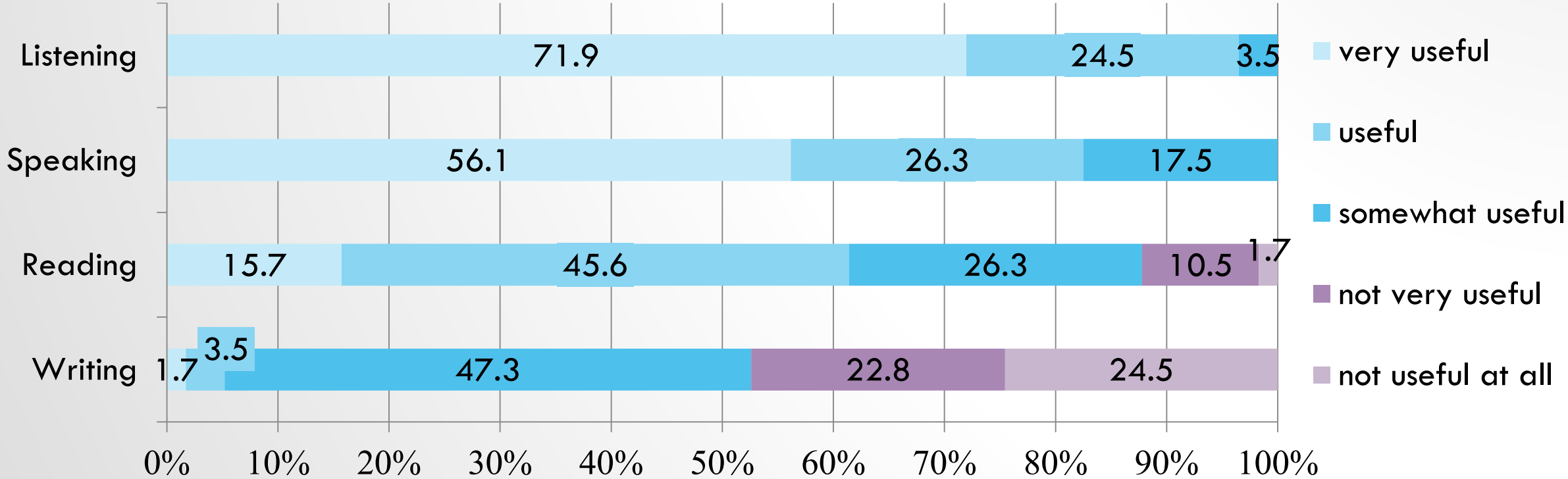
Q2. How useful were the intensive TOEFL preparation classes overall in terms of the skills you need for your flight training?



Trainees' use of English ~survey results~

Q3. How would you evaluate the following skills in terms of their usefulness to you for your flight training?

Listening: Speaking: Reading: Writing:



Trainees' use of English ~survey results~

Q5-a. What was the biggest challenge, language-wise that you faced at UND?

Q5-b. How did you overcome it?

Challenge	How did you overcome it?
<ul style="list-style-type: none">▪ Communication with the instructor Communication in general (Listening, Speaking), Listening and speaking during the flight training, asking questions, keeping up with the speed, being polite, texting, understanding jokes, multi-tasking, making phone calls	<ul style="list-style-type: none">▪ Get used to it, practice in the same situation▪ Listen again, practice, practice through talking with people▪ Draw a picture (infer the meaning, use body languages, try to be friendly, learn polite expressions, use the internet English sites, think all in English, make effort to communicate)
<ul style="list-style-type: none">▪ Air Radio Communication speed, noise	<ul style="list-style-type: none">▪ Listen to the ATC site
<ul style="list-style-type: none">▪ Aural tests	<ul style="list-style-type: none">▪ Practice with the instructor, or friends
<ul style="list-style-type: none">▪ Ground school Tests, listening comprehension▪ Technical terms	<ul style="list-style-type: none">▪ Read the textbooks▪ Use IC recorders

Trainees' use of English ~survey results~

Q5-c. What was the biggest non-language challenge that you faced at UND?

Q5-d. How did you overcome it?

- Acquiring flight skills
- Cultural differences
- Adjusting to the new environment

Trainees' use of English ~survey results~

Q17. How do you communicate with your instructor?

Q18. What helps you communicate well with your instructor

- Texting
- Face-to-face
- Phone calls

What helps you communicate well with your instructor

- ◆ Using gestures, drawing pictures and diagrams, speak, build a good relationship
- ◆ Useful skills : Speaking, Listening, Writing (texting)
- ◆ Technical knowledge
- ◆ Translation apps, voice recognition apps

Trainees' use of English ~survey results~

Q19. Do TOEFL skills help communicating during your training?

Do TOEFL skills help

- ◆ **Listening : communication, listening comprehension during ground school (not for communication with the instructor), briefing and debriefing**
- ◆ **Speaking : communication, briefing and debriefing**
- ◆ **Reading : texting instructors, reading textbooks**
- ◆ **Writing : texting instructors, explaining thoughts**
- ◆ **Ground school**
- ◆ **Getting the overview, summarizing, inferencing**
- ◆ **Vocabulary**

English language skills required by non-native English-speaking pilot trainees during flight training

- Skills to build human relationships with the instructors (English for General Purposes)
- Skills required during instruction (EGP)
- Communication skills (EGP)
- Intercultural competence
- Aviation English (English for Specific Purposes)

Implications for training future generations

- ESP + EGP
- Test preparation + Communication skills
- Language + Intercultural competence

Implications for training future generations

Communicative Competence (Canale and Swain, 1980)

- Grammatical Competence
- Discourse Competence
- **Sociolinguistic Competence**
- **Strategic Competence**

Implications for training future generations

- ESP + EGP
- Test preparation + Communication skills
- Language + Intercultural competence
- **Teacher (instructor) training**
- **Teacher Talk**

Implications for training future generations

Chaudron (1988): Teacher Talk

- ◆ Rate of speech
- ◆ Pauses
- ◆ Self-repeat
- ◆ Pronunciation
- ◆ Vocabulary use
- ◆ Degree of subordination
- ◆ More declaratives and statements

Implications for training future generations

- ESP + EGP
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- Language + Intercultural competence
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References

Chaudron, Craig. (1988). *Second Language Classrooms: Research on Teaching and Training*. Cambridge University Press.

Deardorff, Darla. (2006). Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization. *Journal of Studies in International Education*, 10 (3): 241-266.

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http://www.mlit.go.jp/policy/shingikai/s303_kihonseisaku.html (平成30年10月6日引用)