Understanding and Adapting English Training Needs for Maintenance Personnel - Findings and Achievements in Argentina

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Workshop Contents

• Intro: interests & challenges for training maintenance personnel.
• Research findings: data collected, understanding technicians’ language & training needs.
• Training development: content, language & material selection, progressive testing.
• Our findings: our training results & technicians feedback.
• Highlights of presentation.
Introduction: Interests & challenges in Training Maintenance Personnel

"Precise communication at the right place and the right time is a guarantee for success"!
Our research:

Group work:
Analyzing Data Collected

What technicians told us in a survey...

“My reading comprehension is so-so, but I make up for it with my highlighting skills.”
Survey Questions

1. What’s your role in aviation?
2. What’s your age group?
3. How many years of experience in aviation do you have?
4. What’s your current level of English?
5. In which area of Maintenance do you work?
6. Which are exactly your English communication needs at work?
7. In which situations at work does English play a critical role to safety?
8. Do you feel qualified to read and understand a Manual and/or write a report?
9. What should English training be like for Maintenance Technicians?
10. Are you currently studying English? How often?
Technicians in Argentina said...

Out of all technicians interviewed:

- 13% are in a Chief/Supervisors’ role
- 74% work on the line service
- 45% of them are currently studying English an average of 3 hours per week
Regarding Work Experience

- 20+ yrs: 28.6%
- 11-15 yrs: 23.8%
- 16-20 yrs: 19.1%
- 6-10 yrs: 9.5%
- 1-5 yrs: 19.1%
Regarding English Level

Current English Level

- Beginner: 28.57%
- Intermediate: 42.86%
- Advanced: 28.57%
English level by age group

English Level by Age Group

- Beginner
- Intermediate
- Advanced

18-35 yrs old
36-55 yrs old
55 + yrs old
Language Needs

English Language Needs

- Reading Manuals
- Writing Reports
- Oral Comm w/crew
- Comm w/tower

Bar chart showing percentage needs across different communication skills.
Use of English for Safety

Critical Use of English for Safety

- Interpreting Manuals or Procedures: 60%
- Troubleshooting/Testing: 40%
- Comm w/tower: 20%
- Other: 0%
Qualifications

Feels qualified to understand Manuals and/or write Reports

- Yes
- No
- With assistance
Understanding technicians’ language & training needs

• What conclusion can you draw from the data presented?
• What comment/answer surprised you the most? Why?

"About half the students increased speed and lost some comprehension. The other half increased comprehension but lost some speed."
Training development

Group Brainstorming and Sharing on the following topics:

• selecting contents
• language skills
• materials choice and development
• progressive testing
Our Training Development

• Step 1: Diagnosis- Placement test
• Step 2: Course selection:
  1. English Essentials for Maintenance Technicians - General English & Technical English textbook (A1)
  2. English Fundamentals for Maintenance Technicians - Aviation English & Technical English Textbook (A2- B1+) ...
3. Extended English for Maintenance Technicians - General English & Technical English selection (B2 & up)

4. English for Technicians Dispatchers' Version - Aviation English & Technical English Textbook (A2- B1+) ...
Our assessment

- Below level Ss: Intro level courses
  - Over level Ss: tailored workshops
- 60 hour-long courses
  - Flexible schedule options
- “Free pass” alternative
  - In class & online classes
- Periodical reviews & revisions
  - Final progress check
Food for thought...

How can we face or prepare for an eventual ICAO's LPR's for technicians?
Our findings
Technicians' feedback based on our courses

Survey Questions to Former Students

• What’s your role in aviation?
• What’s your age group?
• How many years of experience in aviation do you have?
• What’s your current level of English?
• In which area of Maintenance do you work?
• Which and how many courses have you taken at APTA?
• Which were the strengths of your course/s?
• Which were the weaknesses of your course/s?
• Have you found useful what you have learned at APTA? What and How?
• What would the ideal English training be like for Maintenance Technicians? What type of classes/courses?
Out of all former students interviewed:

54.5% of all students have taken 2 courses or more
82% have attended Technical Courses
Former Ss by work experience

Work Experience

- 1-5 yrs: 42.9%
- 6-10 yrs: 21.4%
- 11-15 yrs: 21.4%
- 16-20 yrs: 14.3%
Strengths

- Multiplicity of tasks: * Listening Practice * Games * Grammar * Instructors’ commitment
- Instructors’ academic level, didactics, flexible schedule
- Handling of technical vocabulary Fluency
- Innovation: how pedagogical their training is
- All in English
- Aviation English (hard to find)
- Flexible schedule
  - Affordable prices
  - Instructors’ rotation
- Spoken language and grammar
- Excellent: - teaching
  - materials
  - studying & learning environment
- Vocabulary/ Content selection
Weaknesses

None 46%
Course not long enough
Distance to center Grammar
Lack of afternoon availability
Lack of continuity and fluency (personal)
Little grammar
Lack of authentic material
More use of Manuals

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Usefulness

- It made it easier to read and understand manuals
- Got a better understanding of the areas where I am assigned
- It helped a lot, in many aspects
- Very useful for my daily life and for travelling too
- It helped me interact confidently with my colleagues and interpret manuals
- don't know
- Got better reading comprehension
- Effective and important in my learning and it gave me continuity in the use of the language
- Understanding manuals without using a translator
- Very useful for interpreting manuals and when travelling on duty
- All well. According to the level required at work
Ideal Training Courses according to Maintenance Technicians

- Don't know: 15.0%
- Compulsory: 8.0%
- More & Varied Materials: 15.0%
- More grammar: 8.0%
- Face2Face: 8.0%
- Group/Practical: 31.0%
- As is @ APTA: 15.0%
Highlights

Excellent Instructors:
- committed
- motivated
- well-trained

Variety:
- Sources
- Use of Technology
- Projects

Adequate content/level selection
- Progress checks
- Feedback

Meaningful Useful Integrated Learning

Flexibility:
- Schedule Delivery
- Instructors

Technicians’ Training
Thank you!

Any questions?

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