

Challenges for English language training providers to create courses adapted to aircraft maintenance personnel: two case studies

ICAEA Conference - Tokyo – May 2019

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Need / demand for training

- Working with English maintenance manuals
- Working globally
- Communication with pilots, owners, other maintenance organisations
- No specific regulatory requirements for English

Organisation 1

- Part 145 maintenance organisation: approximately 50 maintenance personnel
- Business aviation sector working with English manuals
- Initial requirement to provide English training for report writing

Organisation 2

- State owned helicopter search and rescue organisation
- Around 30 helicopters and 200 flight crew
- All documentation currently in French but likely to change to English due to recurrent translation costs



Questions for discussion

1. What are the most significant course design challenges for a program such as this?
2. How does the course designer decide the learning outcomes for this sort of a course?
3. How can one ensure that participants are motivated?
4. How can the success of such a course be evaluated?
5. How useful or effective might a blended learning approach be to this type of course?

Consultation and Scoping

- Scoping not always ideal
- English language training is rarely off the shelf
- Little regulatory guidance available today (EASA)
- Mismatch between employer/.employee perceptions of required training
- Constraints (planning, availability, budgets) need to be factored in early in the project
- Scoping needs to be a part of the training process

Dialogue / student centred

- A dialogue with all stakeholders is central to our approach
- Context in which participants need English
- This dialogue is a continuous process throughout the course
- Continuous feedback from trainees is essential to keep the course on track
- Encouragement of autonomous work (e.g. using internet resources)

Motivation / confidence

- General lack of confidence
- Poor language learning experiences in the past
- Focus on specific relevant communications and confidence building
- Effective communication can be achieved without accuracy
- Understanding where accuracy is important to maintaining effective communications

Relevance / authenticity

- “English for mechanics” is not really a thing
- The teacher needs some background knowledge of the subject and working practices
- Allow the participants to demonstrate their technical competency

Our experience and solutions

- Training centred on maintenance documentation
- Use of role play exercises for skill acquisition and confidence building
- Trainer competency in both languages on subject matter
- Flexible approach to sessions using varied pedagogical techniques

Answers to the questions for discussion

- 2 workshops held on Thursday May 9th 2019
- 11 groups of 4-5 people
- Different backgrounds: pilots, ATCOs, AE teachers, AE assessors, regulators
- Answers sorted by number of occurrences in decreasing order

1. What are the most significant course design challenges for a program such as this?

- Outside work ship hours – TIME
- Low English level of the participants
- Group size/segmentation
- Technical terms (maintenance manual)
- **Motivation**
- **Different backgrounds of the participants**
- **Instructor knowledge**
- **Course outcomes not clear / unrealistic**
- **Evaluation**
- **Resistance to change**
- **Promotion**
- **Course intensity**
- **Survey/analysis**
- Practice
- Maintenance proficiency
- Specific curriculum customized to the needs of the customer
- Methodology authentic to job
- Constrained environment
- Company commitment related to resources
- Material (English-French-both?)
- General English vs. Specific?

2. How does the course designer decide the learning outcomes for this sort of a course?

HOW

- Conduct a need analysis
- Identify strengths
- Priority skills
- Client needs
- Keep realistic outcomes (simple tangible objectives)
- Time frame

Outcomes

- Simple functional language
- Basic vocabulary + technical (+ link between general English – specific)
- Basic reading principles (Manual structure and keywords)
- Basic writing/reporting
- Practical outcomes – common dialogues (role play)
- Most relevant content for the majority of groups
- → moving towards autonomous development.

3. How can one ensure that participants are motivated?

- **Positive feedback**
- **Different types of rewards (time off, financial, promotion)**
- **Enjoyable classroom experience / lesson active**
- **Lots of visual and authentic materials**
- **Group work / mixture of activities**
- **Build confidence**
- Check list on the road map
- Daily attendance
- Experience the use of learnt in daily tasks and share it with the group
- Invite professionals to show realistic expectations of employment
- Strength-weakness assessments
- Examples of real incidents where maintenance problems led to accidents
- Virtual reality on Ipad

4. How can the success of such a course be evaluated?

- **Progress test**
- **Students' individual feedback of the course**
- **Evaluate actual tasks and potential improvement**
- **Employer's feedback**
- Confidence of the participants
- Self check-list
- Role play presentation

5. How useful or effective might a blended learning approach be to this type of course?

Online: could help very much with vocabulary, distance (geographic). The student can work at home, asynchronous, and then discuss in class only those points that were not understood.

Would allow teacher to follow students dedication to studies

In class: Integrate knowledge acquired in online learning.

Blended learning would help as they have to train out of work, students would be willing to participate more in class as they could manage their own timetable.

It would be effective but there are many factors which may make it harder or stop this approach from working

- type of course
- length
- quality

Thank you!