Course design in teaching aviation English as EOP

Eva Staňková

Abstract: The paper intends to contribute to the development of teaching EOP by presenting the experience gained in designing and teaching an intensive Aviation English course to Czech Air Force professionals. It is focused on course design, namely on the process of its endless refinement. It analyses the outcomes of learners' questionnaires evaluating 11 two-week course runs in the years 2013–2016, and presents how they contributed to the modification of the course design. In addition to that, it suggests some measures that might be adopted to encourage learners' professional development and sustainable lifelong learning.

Key words: Aviation English, ATC, EOP, ESP, course design, course evaluation, Moodle.

Introduction

Due to its multidisciplinary nature, teaching a foreign language for occupational purposes poses enormous challenges to foreign language educators. The courses require competent management based on mutual collaboration of foreign language teachers and subject experts. A course can be designed only after careful needs analysis have been carried out and the objectives of the course have been stipulated. During and after the course implementation, the teaching methods and course materials should be carefully evaluated by both the teachers and learners involved. In the light of the outcomes, the course design should be revisited, and, if necessary, modified.

The findings presented in the paper stem from designing and teaching a course named 'Speaking Refresher for ATCos (Air Traffic Control officers)' in the years 2013–2016 at the University of Defence in Brno. This course belongs to the category of English for Occupational Purposes (EOP), which is a branch of English for Specific Purposes (ESP) and covers situations in which learners are studying English for work related reasons. The course originated in response to the Air Force Headquarters demand to provide ATCos with training that would refresh their speaking and listening skills before taking regular mandatory tests to validate their language proficiency endorsement.

The paper introduces the course characteristics and objectives with the focus on course design and its constant improvements. It presents some aspects of informal and formal feedback provided by course participants which have influenced the course syllabus. It aims to contribute to the experience in the field of EOP which enables language teaching professionals to develop their knowledge and understanding of what is involved in effective course management.

1 Course characteristics and objective

1.1 Course characteristics

The characteristics of the course fully correspond with absolute and variable characteristics of ESP stipulated by Dudley-Evans and Jo (1998). Table 1 shows how they are reflected in the course.

Tab. 1: *ESP characteristics reflected in the course*

ESP by Dudley-Evans and Jo (2002, pp. 4–5)	Reflected in Speaking Refresher for ATCos
The course is designed to meet specific needs of the learners.	ATCos needs: to refresh and enhance speaking and listening skills in the context of ATC (Air Traffic Control).
It makes use of underlying methodology and activities of the disciplines it serves.	It uses specific tasks regarding ATC operational environment: picture and situations description, repeating information, giving instructions, listening comprehension and effective communication.
It is centred on the language, skills, discourse and genres appropriate to these activities.	It is centred on personalized grammar, aviation terminology, speaking and listening skills, and informative discourse.
It is designed for a specific discipline.	It is designed for air traffic control.
It may use a specific methodology.	Use of methodology corresponds to the specific tasks above and is exam-oriented.
It is likely designed for adult learners.	It is designed for ATCos.
It is designed for intermediate or advanced learners.	It is designed for learners who have achieved at least SLP 2222 according to NATO STANAG 6001, which approximately corresponds to level B2, of the CEFR.

If we consider Robinson's (1991, pp. 3–4) division of EOP into three branches: pre-experience, simultaneous/in-service and post-experience, the course belongs to in-service training. British English places similar courses aimed at helping professionals in the work environment into the category of further education, whereas in North American terminology they are often referred to as continuing education. Other variations on this wording include professional continuing education, and continuing higher education.

1.2 Course objective

Language proficiency requirements for pilots and air traffic controllers are set by the **International Civil Aviation Organization (ICAO),** a UN agency specialized in codifying the principles and techniques of international air navigation. From 5th March 2008, all flight crew members and air traffic controllers involved in international traffic are required to prove their competence in English. It is a condition of licensing that professional pilots and air traffic controllers have to demonstrate their proficiency in plain English and English phraseology to a standard equivalent

to level 4 in the ICAO language proficiency rating scales (see The ICAO Language Proficiency Rating Scale and the ICAO Holistic Descriptors in the Manual on the Implementation of ICAO Language Proficiency Requirements in the References below).

The assessment of language proficiency comprises the following three elements:

- listening – assessment of comprehension;
- speaking – assessment of pronunciation, fluency, structure and vocabulary;
- interaction.

In brief, the course objective is to refresh and enhance ATCos' ability to communicate effectively using visual and non-visual communication in both routine and non-routine situations. It is focused mainly on plain English as opposed to radiotelephony. It is exam oriented, aiming at ICAO levels 4–5. The course design serves this purpose.

2 Course design

2.1 Course design in ESP and EOP

The concept and practical implications of course design in ESP are thoroughly discussed by Hutchinson and Waters (2001). For them, 'course design is a process by which the raw data about a learning need is interpreted in order to produce an integrated series of teaching-learning experiences, whose ultimate aim is to lead the learners to a particular state of knowledge' (p. 65). They critically examine the approaches to course design and strongly favour the learning-centred process at the expense of language-centred and skills-centred designs (pp. 72–4, 92–7, 167). Hutchinson and Waters (2001) argue that the course design process should be dynamic and interactive, and 'factors concerned with learning must be brought into play at all its stages' (p. 77).

Their findings are consistent with the theory and practice of adult learning. MacKerachen (2004, pp. 40–41) summarizes findings about the function of the self-concept and self-esteem in the learning activities of adults. They indicate that adults learn best when they are involved in developing learning objectives for themselves, as they are influenced by past learning experiences, present concerns and future prospects. In other words, they are interested in acquiring skills which can be put to immediate use. Obviously, the EOP course participants are the best candidates to exercise their own responsibility in the choice of learning objectives, content and methods.

2.2 Structure and syllabus of the course

The process of the Speaking Refresher for ATCos course design was congruent with the above-mentioned principles. The present design is a result of close co-operation among UoD aviation teachers, English language teachers, an aviation tester, and the ATCos themselves. It represents an open dynamic process subject to numerous changes and refreshing innovations brought about by constant informal feedback and formal evaluation.

The daily structure and brief syllabus of the course is shown in Table 2 below. Each day contains three ninety-minute sessions. Practising grammar, listening, speaking and vocabulary gradually proceeds from the context of work-related issues to specialized aviation topics.

Tab. 2: *Structure and content of the course*

Session 1	Session 2	Session 3
Grammar in ATC	**Exam skills, listening, speaking**	**Aviation terminology**
Verbs, tenses, passive voice, conditionals, reported speech, phrasal verbs, articles. Functions. Common mistakes in Aviation English.	Work-related issues, strategies for describing pictures and situations, listening comprehension, communication in routine and non-routine situations. Sources for lifelong learning.	Presentations on aviation topics held by course participants. Discussions. Feedback and evaluation.

In Sessions 1 and 2, the teachers use commercial course-books, military course-books and adapted authentic materials. A brief account of available course-books for teaching Aviation English with a brief comment on their relevance to both University of Defence students and ATCos was given in the previous conference paper (Staňková 2014).

Among favourite and successful classroom activities in sessions 1 and 2 are meetings with UoD students majoring in ATC, which facilitate natural discussions and impromptu speech. Students also enjoy aviation quizzes and competitions in groups, discussions based on participants' experience, creative picture descriptions and summarizing information with deferred written feedback.

In Session 3, each course participant is expected to give two presentations on selected aviation topics. After their presentations, they are supposed to answer their colleagues' questions and hold a discussion. At the end of the session, the speeches and discussions are evaluated by ATCos, and the teacher provides course participants with language feedback. Such an arrangement allows course participants to maximize class time for speaking, and, at the same time, to demonstrate their expertise in English. According to their informal feedback, these are highly appreciated values, as shown below in Chapter 3, Example 1.

2.3 E-support

As the duration of the course is only 2 weeks, it is beneficial to extend this educational opportunity by electronic support. Three weeks before the course begins the attendees receive detailed instructions by e-mail. They are expected to open a link to a sharable Google document where they sign up for two topics of presentations and get prepared for Session 3. So they start using their English actively before the course.

In addition to that, during and after the course they can access two e-learning courses on Aviation English in the UoD MOODLE open-source learning platform. The first course, 'Course for ATCos', follows the daily schedule of the course and provides the course participants with teaching and additional materials. Moreover, it gathers all presentations from all participants with the aim of assisting their individual needs immediately before their exam, or at any other time. The second course, 'Aviation Databank', is a more complex course which has been designed as a sharable databank for course participants, UoD students and teachers specializing in aviation. Recently it was even offered to English language instructors at the Polish Air Force Academy in Deblin. The E-learning support for Aviation English in MOODLE has been appreciated by course participants in their feedback, as shown below in Example 2.

3 Feedback and evaluation

As presented in Table 2 under Session 3, the participants' feedback and evaluation of the course are embedded in the syllabus and are considered essential parts of the course. In this chapter I intend to share the outcomes of both feedback expressed by individual course participants and formal evaluation of the course based on questionnaire responses from all attendees.

3.1 Feedback from individual course participants

During the sessions, the course participants are encouraged to express their language needs and to discuss the course syllabus. In the middle of the course, they are supposed to come up with suggestions for improvements as a result of collaborative activity. The educators flexibly react to their suggestions and arrange their teaching activities accordingly.

In addition to that there are other occasions when individual course participants express their opinions on the course and give suggestions for its improvement. Two examples are interpreted below.

Example 1

... The ATCos highly appreciated that they were considered subject experts during the course, especially when giving presentations and moderating discussions, as opposed to their pupil/student positions in their school years in the past. Also, they positively assessed the strategy of deferred feedback on mistakes after oral performances. They concluded for themselves that these important factors boosted their confidence and facilitated their speeches and discussions. According to them, these factors and the teachers' communicative and friendly approach contributed to a relaxed atmosphere in sessions and enhanced their performance... (interpreted from the conference speech by 1st Lt. Veronika Růžová at ITEC 2015 in Prague)

Example 2

... The course helps ATCos to prepare not only for the ICAO exam, but also for their professional life. We appreciated the ways the teachers adopted the aviation topics to our needs. I am grateful that the information and teaching materials are available in the UoD MOODLE system; I used them during my preparation for the exam. The collection of listening, videos, quizzes and grammar is thoroughly organized and useful. ... All of us have passed the exam successfully and reached at least ICAO 4 operational level ...

... The following course runs could be enriched by inviting subject experts from the fields of aviation, and medicine and first aid. Also, I recommend close cooperation with the interlocutors examining ATCOs; they could share their materials with teachers, suggest additional topics for discussion and explain common mistakes and confusions at exams. I'm pleased that you intend to develop this course and enlarge the scope of topics and information... (interpreted from a letter by Capt. Jiří Šmit, Commander of the 4th ATC Section of Air Traffic Service at 22nd Helicopter Air Base, Náměšť nad Oslavou)

Both examples are enormously valuable to teachers, since they put forward constructive suggestions for the course refinement. Some of them have already been implemented, as stated below in the conclusion.

Being aware of the fact that feedback expressed by individuals has its limitations and may be far from the participants' majority opinion, all course attendees are asked to provide formal feedback on the course.

3.2 Feedback based on questionnaire responses

At the end of each course run the participants fill in a questionnaire the aim of which is to obtain data about the extent of their satisfaction with the course and their suggestions for its further improvements. The responses presented in this paper were gathered during eleven course runs from the total of 68 participants in the years 2013–2016. With regard to the limited length of the paper, only responses to the most important questionnaire items are presented here. The first set of questions is concerned with the course design and teachers' attitude. The respondents answered the following questions:

1 As you know, the aim of the course is to refresh speaking and listening in the context of ATC. Did the course meet your expectations in this regard?

2 Did the course structure and syllabus serve your needs?

3 Did the course material appeal to you?

4 Did the teachers' approach to teaching appeal to you?

The answers were plotted on the graph in Figure 1. The horizontal axis indicates the questions asked, and the vertical axes shows the number of selected options stated in the right part of Figure 1.
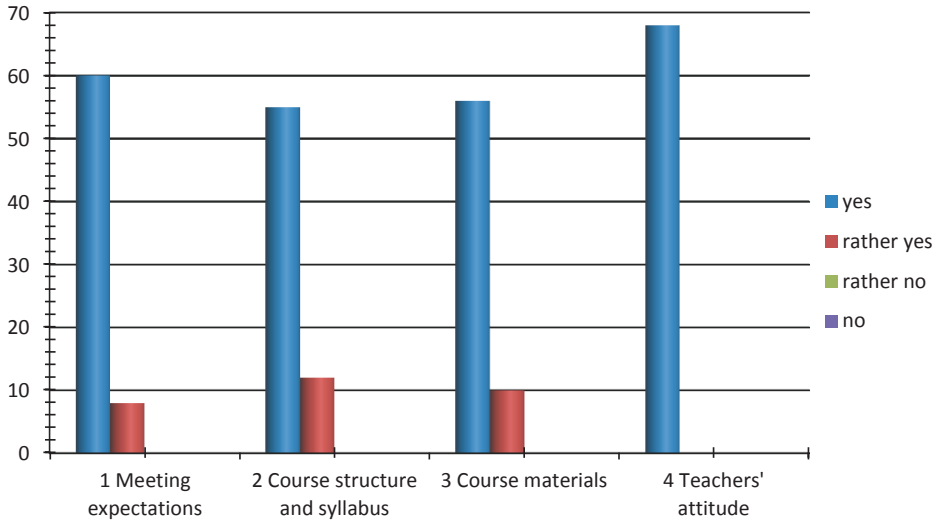

Fig. 1: *Responses to questions 1–4 in the course evaluation questionnaire*

The answers to these four questions are of paramount importance for the educators to assess whether the course meets the participants' expectations and whether the process of pursuing the course objective is appropriate. The responses indicate that all 68 course participants are on the positive side on the scale of their satisfaction.

The next question aims to find out whether or not to innovate the course curriculum by adding radiotelephony to the syllabus:

5 Should radiotelephony be part of the course if it was presented by a subject expert?

The graph in Figure 2 shows the responses in the timeline of 11 course runs in the years 2013 to 2016 listed on the horizontal axis. As we can see the responses vary. Whereas during the first runs of the course the participants did not favour the prospect of including radiotelephony in the syllabus, in the evaluation of re-

cent runs they tend to welcome this suggestion. This shift in opinions deserves teachers' attention and should be taken into consideration in syllabus planning.
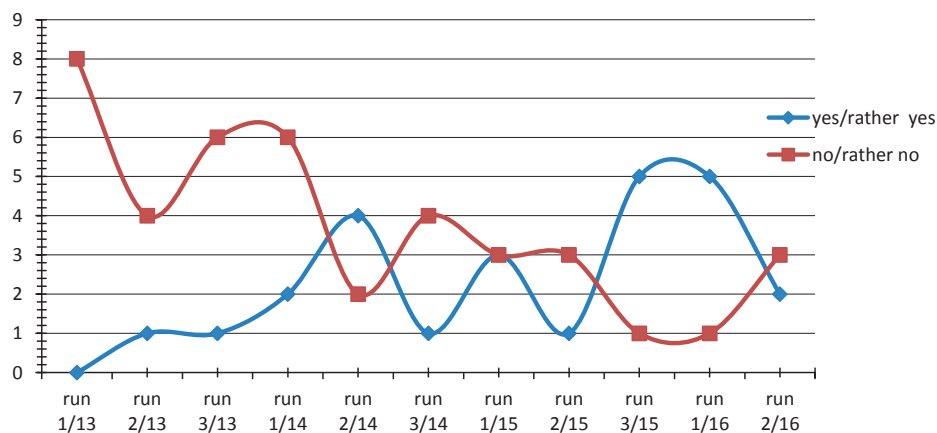

Fig. 2: *Responses to question 5 in the course evaluation questionnaire*

Conclusion

Course design in EOP is a dynamic process of negotiating with learners, in which the learners' needs and opinions have to be considered at every stage. The paper presents a case study based on the EOP participants' feedback and evaluation of the course and its curriculum. With regard to participants' suggestions, the following improvements have been implemented, or are being considered:

- Several topics of participants' presentations have been added.
- Extensive E-learning support for learners of Aviation English has been developed to encourage sustainable lifelong learning.
- Sharable Google documents have been created and used to assist the teacher in communication with course participants.
- A medical student presented medical issues and first aid in the course.
- An interlocutor has been invited to the 12th run of the course to give an account of frequent problems at the ICAO exam.
- Adding radiotelephony to the syllabus is being considered and discussed.

Additional suggestions derived from experience in teaching the course by the teacher:

- To boost the participants' confidence, it is advisable to apply deferred feedback on mistakes.

- The attendees' expertise should be employed and openly appreciated.
- Meetings between course participants and university students facilitate natural discussions.
- Cooperation between English teachers and subject experts brings new opportunities in research and publishing.

I sincerely believe that similar case studies enable English teaching professionals to further develop their understanding and knowledge of what is involved in effecting a successful course design in EOP.

References

DUDLEY-EVANS, T., & ST. JOHN, M., J. (2002). *Developments in English for Specific Purposes.* Cambridge: Cambridge University Press. ISBN: 0-521-59675-0.

HUTCHINSON, T., & WATERS, A. (2001). *English for Specific Purposes: A Learning-Centred Approach.* Cambridge: Cambridge University Press. ISBN: 0-521-26732-3.

Manual on the Implementation of ICAO Language Proficiency Requirements. Doc 9835 AN/453. ICAO 2010. ISBN 978-92-9231-549-8. Citing Net Sources [online]. 2016 [14. 09. 2016]. https://www4.icao.int/aelts/Uploads/ICAO%20Doc9835%202nd%20Edition.pdf.

MACKERACHEN, D. (2004). *Making Sense of Adult Learning.* University of Toronto Press, Canada. ISBN 0-8020-3778-X.

Moodle – informační systém vojenských škol. Citing Net Sources [online]. 2014 [25. 08. 2014]. https://moodle.unob.cz.

ROBINSON, P. (1991). *ESP today: A practitioner's guide.* Hemel Hempstead, UK, Prentice Hall International Ltd.

STAŇKOVÁ, E. (2014). *Challenges in Teaching Aviation English.* In *Foreign language competence as an integral component of the university graduate profile* (s. 150–157). Brno: Univerzita obrany. ISBN 978-80-7231-989-3.

Author

RNDr. Eva Staňková, e-mail: Eva.Stankova2@unob.cz, University of Defence

Author is an English language lecturer at the Language Centre, University of Defence in Brno. Regarding ESP, she teaches mostly English for Engineering and Aviation English to military professionals and civilian students. Eva Stankova is committed to a student-centered approach, seeks new opportunities to engage university students in critical and creative thinking, and involves them in the development of e-Learning material based on their field of study.