# FOREIGN LANGUAGE COMPETENCE SUPPORTED BY ICT AND DISTANCE LEARNING

## Miroslav Hrubý

University of Defence Kounicova 65, 66210 Brno, Czech Republic miroslav.hruby@unob.cz

Abstract: The paper deals with a problem of improving and keeping a foreign language competence of academic staff at the technical oriented faculty. The author's point of view is based on the University of Defence environment where the international military standard NATO STANAG 6001 is implemented. The target group characteristics are described and discussed. Pros and cons of the current approaches are stated. The use of modern technologies and distance learning are emphasized but with the necessity of the independent human beings needs in mind. Finally, a solution which could be beneficial is formulated.

**Keywords:** academic staff, CLIL, ESP, language competence, STANAG 6001.

## INTRODUCTION

The article is written from the Department of Communication and Information Systems of the Faculty of Military Technology (FMT) of the University of Defence (UoD) point of view. Its goal is to introduce the FMT environment and the conditions for language skills improving and testing of its academic staff. The author would like to formulate his opinion on the future development and future suitable solutions in this field which could also be interesting for the academic staff of other technical oriented faculties.

## 1. PROFESSIONAL FOCUS OF THE FMT

The Faculty of Military Technology (FMT) of the University of Defence (UoD) is a technical oriented faculty of a state military university. In the last years it has prepared new study programmes for its military and civilian students separately.

Firstly, since 2014, the FMT has been realizing, according to the new requirements of the Czech Ministry of Defence (MoD), its new five-year Master's degree programme named Military Technology. This new Master's degree programme has

only one field of study. This field of study is also named Military Technology. Subjects and study duties in the first 5 semesters are the same for all military students but from the 6th semester this study field is internally divided into 15 modules that correspond to the names of the required military specialties. These are as follows:

- Automated Command and Control Systems;
- Combat and Special Vehicles;
- Communications and Information Systems Information Technology (IT);
- Communication and Information Systems Communication Technology (CT);
- Aircraft Avionics and Armament;
- Aircraft Airframes and Engines;
- Air Radio Navigation systems;
- Air Staff Officer:
- Airbase Engineering Support;
- Radar Technology and Electronic Warfare;
- Air Traffic Control:
- Military Geography and Meteorology;
- Military Pilot;
- Weapons and Ammunition;
- Military Engineering.

One year after, since 2015, the FMT of the UoD has been started the new civilian Bachelor's degree study programme "Technologies for Defence and Security". It covers three fields of study:

- Communication and Information Technologies;
- Technologies for Protection of Assets and People;
- Weapons and Ammunition.

Two new fields of study are being prepared for accreditation process. These are:

- Aviation Techniques;
- Geography and Meteorology for Defence and Security.

A very large range of various technical fields covered by the FMT UoD is visible from the previous text. These technical fields have their own special terminology which is not always generally known.

Contemporary technical fields are especially connected with English which is also the foreign language No. 1 at the FMT UoD. Not only General English but also English for Specific Purposes (ESP) plays an important role at the FMT UoD. Besides, other world languages such as French, German and Russian have also their important place in a professional communication and their knowledge is ever welcome there.

## 2. THEORETICAL BACKGROUD

The theory of Second Language Acquisition (SLA) is often presented by a model which was developed and described by Krashen (1981), (1982). He described how the process of language acquisition and language learning occurs. Hutchinson and Waters (1987) specified the concept and scope of ESP. Further development of ESP was done by Dudley-Evans and St. John (1998).

Nowadays, foreign language teaching, learning and testing are strongly influenced by modern ICT. Stankova (2009) described effort of English language teachers to provide UoD students and staff with access to an effective e-learning support. Franc and Stankova (2011) propose Moodle as an efficient and cost-effective technological solution for a virtual learning environment in the Czech Armed Forces (CAF).

Some authors are publishing their latest articles focused on key components of work efficiency in the field of foreign language, e.g. motivation (Kotekova 2015), self-regulated learning of adults (Kalenda and Vavrova 2015), CLIL method usage (Prochazkova 2015), effectiveness of ESP e-Learning course from the users' point of view (Kucera and Kucirkova 2015).

#### 3. NATO STANAG 6001

All NATO member states are required to guarantee communication competence of their military professionals and employees of MoD. English language exams are based on the STANAG (Standardization Agreement) 6001 specified by NATO Standardization Agency (2010) in contrast with the Common European Framework of Reference for Languages (CEFR) specified by the Council of Europe (2014). Useful information connected to STANAG 6001 can also be found at the Military English web (2015).

# 3.1 Structure of the NATO STANAG 6001 Language Exam

NATO STANAG 6001 is a language proficiency scale designed to allow comparisons of language ability in different countries. STANAG 6001 clearly specifies the requirements for particular language skills. Descriptions give detailed definitions of the proficiency levels in the commonly-recognised language proficiency skills:

- "Listening" (L),
- "Speaking" (S),
- "Reading" (R),
- "Writing" (W).

The language exam according to the STANAG 6001 consists of 4 independent exams which are taken place on the same day.

The language proficiency skills are broken down into six levels coded 0 through 5. In general terms, skills may be defined as follows:

- Level 0 No proficiency;
- Level 1 Survival;
- Level 2 Functional:
- Level 3 Professional;
- Level 4 Expert;
- Level 5 Highly-articulate native.

A series of plus (+) descriptions is provided. A plus indicator may be added to a base level for training, evaluation, recording or reporting purposes, to indicate a level of proficiency that substantially exceeds a 0 through 4 base skill level, but does not fully or consistently meet all of the criteria for the next higher base level. In the Czech Republic a plus (+) descriptor means 60 % of a higher level.

## 3.2 NATO STANAG 6001 Language Exams in the MoD

Nowadays, every working position in the MoD has set an English language proficiency profile SLP (Standardized Language Profile) by four numbers, e.g. SLP 3322 means level 3 in Listening, level 3 in Speaking, level 2 in Reading and level 2 in Writing. Every employee, including academic staff at the University of Defence, has to fulfil the language requirements by December 31, 2019. If not, he/she will not be qualified enough for his/her working position.

Language examination according to NATO STANAG 6001 is provided by the Language Training Centre (LTC), which is a part of the University of Defence. The mission of the Testing and Methodology Department (OTM) of LTC is to organize and guarantee the quality of language tests according to STANAG 6001 in the following languages:

- English (up to Level 3),
- French, German, and Russian (up to Level 2).

## 4. LANGUAGE REQUIREMENTS FOR THE ACADEMIC STAFF

The FMT academic staff members in terms of language training specifics are a very highly diversified audience. Their foreign language needs can be structured into a general knowledge of a foreign language and knowledge of a foreign language in a specific area – not only the department focus but often also individual concrete focus.

Each academic staff essentially requires knowledge of at least one foreign language at a level enabling him/her:

• to read with understanding a foreign language professional literature from his/her professional focus;

- to write articles in professional and scientific journals in the field of his/her specialization;
- to prepare contributions to conference proceedings, technical and scientific conferences;
- to process expert opinions to publications and other scientific works;
- to create computer presentations for conferences and seminars;
- to work actively at conferences and seminars on the topic prepared;
- to engage in discussions at conferences and seminars;
- to prepare study materials for students in a foreign language;
- to conduct formal and informal discussions when dealing with foreign students;
- to conduct formal and informal discussions during negotiations with partners from abroad;
- to use e-mail communication in a foreign language;
- to use voice communication over the Internet with foreign partners.

Available foreign language courses aimed at a concrete output SLP (e.g. SLP 2222) are offered in face to face and blended forms. It is not possible to take part in the same course more than once. The method of self-regulated learning seems to be the most often used by the academic staff. It is sometimes the only possible method of language learning of academics due to their uneven workload and duties during the academic year.

The LTC can support this process in the field of general English without problems but the academic staff should be also trained and tested in ESP according to the focus on specific technical fields of various departments. The special technical terminology and its proper usage can be for English language teachers rather difficult and sometimes almost out of their competency borders.

## 5. LANGUAGE TESTING APPROACHES DEVELOPMENT

The foreign language competences should be permanently developed to the level required by an employer or a higher level according to an individual ambition of a concrete academic worker. The compliance between the current level of language skills and the level required should be verified. This verification should be conducted in a suitable manner to find out the real status or confirm the expected level of foreign language competence.

Two approaches to the foreign language testing in MoD Czech Republic are compared in Table 1. The author believes that the main weak point of the current MoD Czech Republic measures is unlimited validity of the last result of NATO STANAG 6001 exams. It would be interesting to verify if exams results older than 1 year are telling the truth about the current state of required language skills.

Table 1.

Comparison of previous and current testing solutions in MoD					
Solution	Validity of language exam result	Pros	Cons		
Previous	The best result in testing history is valid without restriction.	Enables further education without worrying about losing.	The result does not correspond to the current state.		
Current	The last result of language exam is valid without restriction.	The result may better correspond to the current state.	Demotivation for further learning and improving of language skills.		

Source: Own work

Based on the author's experience from the FMT UoD environment, the suitable solutions could be formulated as follows:

- the period of testing could be 1 year;
- the best result achieved in the last two years could be taken as valid.

This approach should bring a very good motivation for lifelong language learning of the academic staff and the knowledge of real true data about language competence of every person. On the other hand, this approach can lead to much more work for testers.

The alternative solution which reduces demands on testers could be based on the so-called "light version" of NATO STANAG 6001 testing. It would be intended for them who have fulfilled their required SLP. These "SLP confirmation exams" proposal could consist of only the "Listening" and "Reading" NATO STANAG 6001 exams. The LTC can realize these exams in their IT classrooms without major problems if requested. The academic staff should confirm SLP within one year. Without successfully passed "SLP confirmation exams" at least once in last two years the validity of NATO STANAG 6001 exams should be lost.

Due to the fact that NATO STANAG 6001 is not very well known outside the military, the author prepared a proposal of solution which could be used at technical faculties generally. The base of this proposal is a modification of the NATO STANAG 6001 approach. In order to reduce the workload of testers the suitable massive use of ICT is assumed.

It is necessary to keep in mind that "Writing" exam requires a computer application which can be the same or similar to one which for the last few last years has been used by OTM LTC UoD during the English NATO STANAG 6001 "Writing" exams.

A test taker fulfils his/her assignment with the help of a standard computer keyboard. No dictionaries or other helpful materials are permitted. He/she can copy

and paste parts of his/her text and all the time he/she has information about how many words are contained in his/her current written text and how much time remains until the end of his/her exam. Till the end of a time limit the text which should fulfil the assignment, is upload to the server for the evaluation by testers. This approach to the "Writing" exams is very beneficial for both test takers and testers. Pleasant computer environment for test takers and especially a comfortable evaluation environment for testers can hardly be compared with previous handwritten exams.

Table 2 presents the author's proposal for the English language testing of the academic staff which could find its place at technical faculties.

Table 2. Proposal of the content of annual testing for keeping language competency

Skill	Place	Method	Time
Listening (General English)	Computer classroom	30 items audio or video recordings, test taker selects one correct answer from 4 options (multiple-choice questions, one correct out of 4).	40 minutes per one group of test takers.
Speaking (both General English and ESP)	Not important	Free discussion focused on selected topics with two testers.	15 minutes per one test taker.
Reading (General English)	Computer classroom	30 items texts possibly with graphical information, test taker selects one correct answer from 4 options (multiple-choice questions, one correct out of 4).	40 minutes per one group of test takers.
Writing (General English)	Computer classroom	Test taker has to fulfil an assignment on PC; no helpful materials can be used.	30 minutes per one group of test takers.

Source: Own work

The author assumes that his proposal for the future approach to foreign language skills testing with one year testing period could bring new motivation and better results in the field described. Group testing in a computer classroom is possible for "Listening", "Reading" and "Writing". It can be realized annually on the base of contemporary NATO STANAG 6001 exams. The only problem could arise with the "Speaking" exam. The NATO STANAG 6001 approach to this exam may be unworkable because of time demands placed on testers.

# 6. POSSIBLE USEFUL AND EFFECTIVE ELEMENTS OF LANGUAGE PREPARATION

The suggested conception for academic staff preparation is based on a conviction that the key to success rests in the application of the typical principles of "open learning", "distance learning" and "e-learning", such as openness to everyone, independence of time and pace of study. The reinforcement and support of individual preparation and study of academic staff by the sensitive, balanced and attractive use of the accessible ICT always has to be considered priority.

The system should efficiently facilitate the preparation and perfection of all four language skills that are tested as a part of the STANAG 6001 exam (L, S, R, W). Moreover, it would be beneficial to devote a lot of space and means to support English grammar and ESP. As a result there are six areas involved mastering of which guarantees the resulting quality of the whole.

Besides common support of general English, ESP should be supported by the co-operation of faculty technical departments and language professionals including native speakers, if possible.

The author means that the most effective supporting elements for the academic staff are:

- teaching foreign students in the Czech Republic in English;
- participation in Erasmus+ programme, especially in English speaking countries, according to the faculty offer and real possibilities;
- taking part in group consultations especially with native speakers;
- the possibility to be supported by ICT learning tools;
- group discussion on selected topics with native speakers;
- self-assessment on the base of ICT with an emphasis on the listening skill.

The self-assessment tools play a role of a very significant factor in the whole process of study and preparation for the language exams. The elderly often find out that their listening skill is getting worse and it is necessary to practise it regularly. Age affects this skill very negatively.

## **CONCLUSION**

The topic of foreign language competence of academic staff requires permanent attention at the faculty and department levels. Academic staff of technical faculties need to study especially English because knowledge of this language enables and supports research activities and development of guaranteed technical study fields. Underestimation of this task can also lead to unpleasant effects in publishing activities and co-operation with foreign partners. Keeping records of the true level of foreign language skills is a key prerequisite for required work results of the academic staff.

The main suitable form of language training for academic staff is especially self-regulated learning supported by ICT. It should probably be a form of distance learning, supplemented by group self-guided tutorials. This self-study should be supported by properly processed electronic materials available on a server of the faculty, which employs this academic staff. This method of language learning of academics may be, due to their uneven workload and working, the most effective way. The described author's proposal of the rules for the language competence testing can contribute to keeping up-to-date foreign language competences of the academic staff. Due to possible technical and professional demands, the necessary co-operation among technical departments and foreign language teachers is suggested.

## REFERENCES

- Common European Framework of Reference for Languages: Learning, Teaching, Assessment, [online] at http://www.coe.int/t/dg4/linguistic/source/framework en.pdf, (accessed 28 June 2016)
- Dudley-Evans, T. and St. John, M., 1998: *Developments in English for Specific Purposes*. Cambridge University Press, Cambridge, ISBN: 978-05-215-9675-6
- Franc, V. and Stankova, E., 2011: *E-Learning through Moodle in the ACR from the Administrator, Tutor and Student Perspectives*, Distance Learning, Simulation and Communication (DLSC 2011), University of Defence, Brno, pp. 87-94, ISBN: 978-80-7231-695-3
- Hutchinson, T. and Waters, A., 1987: English for Specific Purposes: A Learning-Centred Approach. Cambridge University Press, Cambridge, ISBN: 978-0-521-31837-2
- Kalenda, J. and Vavrova, S., 2015: Mapping the Self-Regulated Learning of Adults, Proceedings of the 12th International Conference on Efficiency and Responsibility in Education (ERIE 2015), Czech University of Life Sciences, Prague, pp. 239-249, ISBN: 978-80-213-2560-9
- Kotekova, D., 2015: *How to Enhance Motivation in Students of a Foreign Language*, Proceedings of the 12th International Conference on Efficiency and Responsibility in Education (ERIE 2015), Czech University of Life Sciences, Prague, pp. 263-272, ISBN: 978-80-213-2560-9
- Krashen, S., 1981: Second Language Acquisition and Second Language Learning. Pergamon Press, New York, ISBN: 0-08-025338-5
- Krashen, S., 1982: *Principles and Practice in Second Language Acquisition*. Pergamon Press, New York, ISBN: 0-08-028628-3
- Kucera, P. and Kucirkova, L., 2015: Effectiveness of Business English e-

Learning Course Viewed from Student's Perspective, Proceedings of the 12th International Conference on Efficiency and Responsibility in Education (ERIE 2015), Czech University of Life Sciences, Prague, pp. 303-309, ISBN: 978-80-213-2560-9

- Language Training Centre University of Defence, [online] at http://www.unob.cz/en/lc/Pages/ default.aspx, (accessed 28 June 2016)
- Prochazkova, L., 2015: Overcoming the Affective Barriers to CLIL in Mathematics Teacher Trainees, Proceedings of the 12th International Conference on Efficiency and Responsibility in Education (ERIE 2015), Czech University of Life Sciences, Prague, pp. 460-467, ISBN: 978-80-213-2560-9
- STANAG 6001 Military English exams and tests, [online] at http://www.stanag6001.com/, (accessed 28 June 2016)
- STANAG 6001 NTG (EDITION 4) Language Proficiency Levels, [online] at http://www.unob.cz/cjv/Documents/Stanag6001\_AJ.pdf, (accessed 28 June 2016)
- Stankova, E., 2009: *Tailoring English Language Learning Object to Students' Needs*, Distance Learning, Simulation and Communication 2009, Proceedings, University of Defence, Brno, pp. 165-168, ISBN: 978-80-7231-638-0