# STUDENTS WITH LEARNING DISABILITIES AT THE CTU

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**Abstract**

*My contribution deals with learning competence of foreign language learning of University students with learning difficulties of Technical Sciences and specific learning style focused on the communicational platform. The choice of an adequate learning style and topics appears to be crucial as well as the enhancement of motivation for communication, the most difficult learning pattern for technically oriented students with disabilities, influenced by different inner factors.*

**Keywords:** *learning styles, technical topics, speaking skills, English for special purposes, material choice, students with learning difficulties*

## 1. INTRODUCTION

In the past few decades, the rising number of students with learning difficulties has been entering my courses of foreign language learning, particularly in English and French for Specific Purposes. Using English language on a certain language level has evolved into a prerequisite for success at work all over the world. Therefore foreign language learning has been promoted in the classrooms from preschool to the university as a way of increasing learner motivation, learning and later working efficiency. In the past period pupils of higher classes of Grammar Schools and High School as well as University students with learning problems had to meet their troubles on their own and somehow bypass their learning obstacles through their educational path. Some leadership and mentoring was reserved just for first school grade. This approach changed and last now we meet students with dysortography or dyslexia in university classes and we have to meet their demands for different leaning inputs.

Talking about my "focus area" of ESL students at the universities of technical field, we must take into consideration specific implements of the class work as lack of motivation for learning any foreign language, higher drop-out rates etc. These students choose engineering mostly for their long-time existing passion for technology and they do not want to be bothered by human sciences programs including foreign languages. Four special needs students this is true of doubles. We should find some way to motivate these students better on that field. If we come up with Van Ek´s communicative model, presenting the major background of European Union Educational policy, we should keep in mind all six components of it during the educational procedure. When focusing on future engineers, we could see as the most problematical discourse and social sides of this model. Furthermore I would state that trying to enhance the communicational-speaking skill as the most problematical one as well as bypassing of lifeless and incomprehensible learning materials is crucial for learning process in engineering ESP class. Scanning and reading through all these papers for getting information of the field or building the vocabulary present a real burden for learning disabilities students. In general, emphasizing of communicative competence in foreign language of technically oriented students can present certain difficult items. Some students do not have any problems and communicate freely through any skill using the real target language vocabulary, but for most of future engineers the speaking skill may present a real obstacle. In passive use of foreign language they do not show big difficulties – if we do not take into consideration the group of dyslexia students - in reading they are often eminent. On the other hand, getting these students to speak more means sometimes an up-hill battle due to their low self-esteem concerning communicational skills in general. Moreover their oral competence is often connected to their self-image tackled by Self Fulfilling Prophecy. We might notice sometimes some awkward attempts to speak fluently but punctuality and fear of making mistake present too high walls to climb in this language feature. They prefer not to talk to the attempt

at communication which as they expect - would probably end in failure in public – in front of the class, which is even worse for special needs students.

## 2. THE CLASS PRACTICES

The focus group are students of Czech Technical University in Prague with learning disabilities, especially dysgraphy, dyslexia and dysortography. Practically they can have English Language learning through two years for Bachelor Exam level B2 followed by Master Degree Exam from Second foreign language together with other students in the class, or they can ask for individual plan and individual lesson. If their request is approved by University Centre for special needs students, they are entering the individual ESL course of technical focus. The real situation is that most of them pass just half a year in the class and they are heading for passing the Exam without further studying of the language. Students participating on PhD programmes must pass the PhD level exam from one foreign language. The target language is Technical English-ESP plus General Language of a certain level. They fail twice more than students without learning difficulties even if they pass special exam tests tailored for these students.

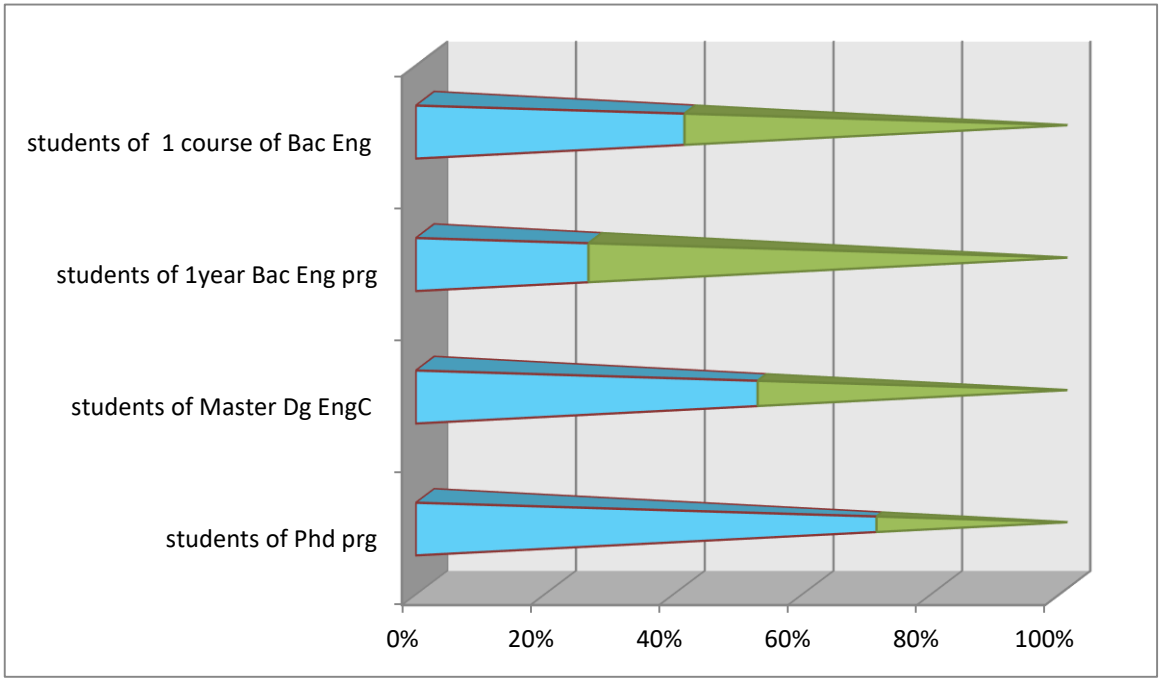
One part of the problem is their underestimation of foreign language learning at the technically oriented university, sometimes they feel it like inappropriate pendant of difficult “core” subjects. Some of them even suggest that passing the language exam is just some formal issue. They still do not realize that coming from a small state with difficult mother tongue means for every single nice career tracker in whatever field quite good level of English. For engineer as well as Med. doctor or writer. Trough job interviews they are asked for second foreign language level, they have. For many of them, their language skill is their job limit and even though they are good technicians or doctors, their job positions are not as good as they were dreaming about just because of that language limits. We are trying our best to persuade them about the importance of foreign languages, but still it presents a long way to go. It does not meet their learning motivation too often. And if we talk about special needs students, it is even worse. Some of them try through papers from different departments to avoid all parts or at least some parts of language exams, which is inacceptable. Nobody will take into account some” papers” from some Psychological Advisory Office in their future jobs. They will have to use all language skills correctly.

Another part of that issue is that many students want to study the language but they feel like future failures. Students´ esteem of their level of foreign language is often rather low, we can tell that they expect worse than the reality shows. Especially Technical Sciences students are rather sharp to themselves, which influence their learning procedure and result of it afterwards.

I have been doing my survey of the students´ self-esteem of the estimated level of English language before different exams, based on all language learning features – reading, writing, listening and communicative skills. Because of smaller experimental group, altogether 96 students, the research was implemented within the course of English Course – Bachelor Exam level, Master Degree. Level and Phd Presentation Course I delivered in winter term and partly this summer term. For the qualitative research, I used credit tests scores, presentations scores and a non-standardized questionnaire containing statements, focused on the aspects like self-believe in student´s ability to deliver a speech in public, ability of face – to –face reaction in ESL, students esteem of used vocabulary etc.

The blue colour shows non efficient level of the language, the green colour is the targeted level or higher. The final score evaluation was made by students themselves, they marked their work *according to their own estimation.*

**Fig. 1.** Entrance level of English level for English Exam




1 Course of Bac Eng. Course - 4 months of Technical English plus revision of Grammar needed for passing credit tests, focused level - Level B2-C1

Level of English Language – after four months of the course 38% of students reached

1 Year Bac Eng Programme - 4+4 months of learning followed by exam period, basic learning material - English for Future Engineers, focused level B2. C1

Students of Master dg. Eng Course – Different learning materials, spine book English for Self-learners, focused level B1, B2

Students of PhD prg. – Different Materials of technical field, focused level C1

Clearly if that was true, not many students would finish our university because of English. The reality is that we have only 5 to 7 per cent of "Exam failure" in English Exams. Why this low self-esteem and this "dark" relationship with foreign languages use and learning?

When evaluating their work, students put the lowest score always on communication skill. For majority of students of technical focus the speaking pattern of the foreign language appears to be the most difficult. Naturally this issue is even worse for special needs students. They can deal with text work or grammar without bigger difficulties, but when the communicative skill come up, they often feel unsecure or offended by their communicative level of English and by lack of English Proficiency vocabulary even though they have been doing well up to that moment. The inner factors as Self Fulfilling Prophecy or Lost Face Enigma - especially for Asiatic students – are not helpful on that field either. It is important for teachers to understand the nature of their students´ long-term motivation forces and how best to tailor each student´s learning experience in order to connect with their respective motives. In some courses, especially with higher number of IT department students, we feel like being all special needs people. Their trust in their language work is quite tinny.

The pressure of achieving is understandable as university is essentially a gateway to the future. Whether the future is a career in engineering, in biomedicine or in economical field, progression is governed by objective assessments as passing the credit test for example. But this kind of "success – motivation" can hamper all educational process especially if the exam pressure is too high. The students can easily feel unsecure in communication and see their coming failure. The relationship

between the cognitive and emotional aspects of the learning procedure is crucial for succeeding in learning - clearly united with motivation. For getting students to learn we need to empower them with a view of future success not only on the field of language skills, but also in the frame of work opportunities. Their motivation should be reinforced by day to day linguistic performance showing more and more successful use of the language, in which fluency is the most difficult skill to develop. As I mentioned before, technically oriented students prefer passive language features, writing and especially reading, the active part – as speaking – is not the cherished one. In doing so, they lower the number of their possible future job offers or participation on exchange program between universities of the whole world.

## 3. "MISTAKE FEELING"

Work with the mistake "enigma" is a core stone of all learning, not only language one. Students sometimes do not see making mistake as a basic step and inevitable step in learning progress. They feel it quite negatively. In some cases they might be avoiding communication only not to experience embarrassment in the class because the attempt to speak made him or her insecure and ashamed of the level of spoken English. There is a saying "Fear of Mistakes Feeds on Itself". Foreign English speakers who are worried about making mistakes have their language improvement heavily impeded. It is important to point out that we are not able to go forward in learning without this natural part of learning. If students constantly fear making mistakes when speaking English, they will avoid real communication and therefore they will find hard to improve their communication skills. It will create a real communication barrier. Students need to see mistakes as an integral part of being foreign English speaker as well as they see normal the need of getting English grammar right or the use of proper vocabulary and phrases. My aim is to find possible remedies to this problem which may necessitate different strategies: *work with mistake, setting of objectives of materials and building interest in learning by choosing adequate topics focused on technically interesting domains*. I try to work with all parts of communicative competence with a point on speaking. Catching the attention of students by working with their background knowledge of the material and by their interest in the special "working platform" plays a major role as well as using different learning strategies throughout the lesson unit.

## 4. LEARNING MATERIALS

To find some guidelines for right choice of materials is not an easy way - considering time, syllabus, exam topics and other limitations. The right start is answering the question: What do we want the materials should offer? What communicative skills should it enhance? There are several points to be fulfilled as stimulus to learn for example. Good material will not just teach. It will *encourage* students to study more, to open their mind more. It will empower the student's motivation for reaching for more. Those materials will contain opportunities to use the existing knowledge and deepening of their skills as well as offering interesting texts. Materials should not be tightly structured to prevent monotonous esteem of the lesson and to leave some field for prompt answer or unexpected developments. The students should not feel themselves as a part of the assembly line process while doing the same pattern of units. And last but not least, teaching materials should mirror the student's needs, not the teacher's interests. A linguist can be fascinated by a hard breaking analysis of some grammar rule, but the future engineer or veterinary doctor may not have nice time with it. My "core" materials should than offer a coherent framework for different aspects of learning. They are chosen according to four major elements, creating basic frame of the unit and cooperating with all communicative skills: *content, language, input and task.*

Starting with task, this should present a *language use* as the main purpose of language learning. Topics and materials should be designed to lead towards a communication with the use of content and language knowledge built up through the unit. Task is the primary focus of the unit.

Language focus means to enable students to really use the language. We must be aware of the framework of students, of their vocabulary operational field, therefore we must pick communicative

tasks of right language level to not to intimidate students to speak. Without necessary language level tailored for that group of students there would not be any good income from this activity. We should not intimidate, we should empower by creating opportunity to be successful. The manner in which we speak , the appropriate choice of language for the many social situations in which we find ourselves…all create a vital part of language focus planning.

Input - concerning building of vocabulary domain focused on future engineers, I need to choose „fresh" vocabulary, because „technical vocab" comes with some new terms quite fast and till they reach the book print, they may be „off the game". A good example of building vocabulary is working with a video from CNN News – technically oriented, or a text from CNN or BBC News. Those are accompanied by a main textbook – English for future Engineers by Dana Jirku and by convenient topics of communication.

## 5. LEARNING STYLES

For decades, many learning styles have been introduced to enhance the process of language acquisition. Nevertheless, neither education experts nor language methodologists have adopted a single core definition of learning style, because it seems to be a living and constantly changing organism trying to keep pace with requirements of changing society. Methodologists have agreed on the positive impact of teacher awareness to make the educational procedure more effective and also more attractive. Every student needs theory has been completed with exercises and practical examples, grammar and different social skills - comprised in learning materials. University students accent the need to extend key learning skills of deep processing, self –regulation, or concretization. The best adjectives indicating a good feature of a learning style are "enthusiastic", "interactive", "not patronising", "clear communication" and other – according to the remarks made by students. We must also take into account the influence of web - based features, which change the ambiance of learning and demands special communicational points. Through internet-based learning we track key or feedback in general as the most essential factor together with clear organisation playing major role in deciding what and where study in web frame. Feedback provided and transparent layouts were evaluated as the most important factors to be considered on creation of lesson plan for me as a teacher too. And there are other points when tailoring the adequate learning style for a certain class - if we talk about future engineers, English for special purposes represents "technical roof" on general "language house", which means, that technical part is possible after general language encompassment. This presumption signifies sometimes quite hard work through first years of university. Students should come to that institution with similar level of English from High Schools, but reality is different, as always. And there are many other points in educational implementation on that field, we can´t go through when writing an article, not a heavy book. So what can be really done for these students in this educational frame?

I am not discovering America when saying that students become de-motivated when being taught a subject in abstract. There is a need of topic ´s relevance, of possibility of application of school studies to the proverbial "real world". So what kind of real situation can be invented during lessons?

I found as the most beneficial "oral presentation" part. The students who took the English courses with me have to give oral presentations in groups or individually twice a week, once for 5min, the second presentation is longer- 10 to 15min. This type of cooperative learning is fruitful also to Asian students who are influenced by Confucianism, in the sense of bypassing their alleviates and anxiety and concern about "losing face" when working with peers and speaking in front of the class. Therefore it allows to all students a great deal of control over precise topic selection, process of collaboration, vocabulary choice and others. When students work on the presentation or when delivering it, they use all language skills and especially communication, even if they do not feel strong in it. They presage that to explain things in public will be their daily bread one day. There is a feeling of connection between the theoretical work and its real-world relevance of what they are studying because of future "good job prospects". And speaking in front of the class comes with other benefits - it promotes fluency via meaningful language use, presents opportunity of feedback from others. Peers and teachers

are basically "kind correctors" helping to build speaker´s self – esteem. It can also feed willingness to participate in class when accomplishing a goal – interesting presentation of the topic I like and I choose - artefacts for communication. Students have some "technical" frame of topics – but they can choose what domain exactly they would like to deal with. It is their free choice which can motivate them and which can help to bridge their bearing on communication in foreign language.

## 6. REAL LESSON INPUT

To realize fruitful and creative learning in the **E**nglish for **S**pecific **P**urposes area of technical English is unthinkable without preparation of working frame and clearing some important items. I must prepare special files for learning vocabulary for students with dyshraphy, or alternate the way of proceeding the task. All students should have the opportunity to feel success in the class.

Surely we must know the class aims, abilities and fulfil educational demands for the suitable course. The right start is trying to embrace the basic knowledge of students in general.

*My points of procedure:* student's use of information, skills of processing this information, „mining" their existing knowledge of language, „mining" their knowledge of subject matter, implication of new language features, accent on speaking. And we should state where to go from the starting point, what means we should use when focusing not only the targeted level of the language, but also ambiance through learning praxis.

*Focused skills*

Speaking – Student is able to interact in conversational English, to give a survey of the topic of the lesson, he should respond to questions from the class, he should be able to give explanation of some specific technical terms, students are able to participate in the whole class discussion when using correct vocabulary etc.

Reading – Exigencies – expose/presentation in front of the class, understanding of specific information, text organization features, structure etc.

Writing – writing of text types such as an article, a review, expressing opinions, suggesting, preparing a presentation etc.

Listening – students should show understanding of detail, specific information, relationship, attitude etc.

The implementation of files from counsellors from Centre for students with disabilities is very helpful, but still I must prepare "self-made" materials, when I know the students more and understand his or her demands better with the passing time.

*Unit analysis*

Class: who are the learners, study specialism, knowledge of English, interests, educational backgrounds

Methodology: what kind of exercises / whole class - group, language skill practice or use, one or many right answers etc.

Aims: what are the aims of the course

Content: what language points should be covered? What micro-skills are needed? What types of texts?

*Example of a real lesson*

*Topic: Technical equipment used in World Wars up to now*

*Sub topic: Technical evolution, discoveries and inventions, trenches battle field,* D-Day, chemical warfare gas, military vocabulary, types of boats and their equipment

*Required time:* 90 min one unit (this topic is divided in 3 or 4 units)

*Class:* This material choice is intended for second grade students of Czech Technical University with the language level B2 and upper, number of students in the class – 8 up to 25 students (2 to 5 students with disabilities in one class)

*Points*: technical equipment used in 1944, comparison of 1944 technique and that of 2016, Murphy Grammar, vocabulary focus – Planes, military vehicles, Boats

*Overview*: Students should be familiar with the use of new vocabulary and grammar features in free conversation or presentation of chosen topic. This activity will allow students to practice all language learning features

*Key skills*: students will be able to discuss the topic, they will be able to use the new language features in presentation, dialogues, and they will enrich their technical vocabulary

Procedure:

*Sample materials for one unit*

Starter: For example text World War II */ from inside Out.net /15 min*

„*Starter" opens a field of knowledge for the comprehension of the unit. It should activate the student's mind, operational frame and get him/her into thinking about the chosen topic. Starter also reveals what students already know on the language and content field so teacher can also adjust the lesson taking this into account. All this offer a meaningful context for introducing new vocabulary or grammatical items. Starter presents an opportunity for students to use their own abilities and knowledge even beyond the information in the input part.*

1. Checking the background knowledge concerning the topic

Van Ek – discourse side, social side

Mining the existing knowledge and encouraging the discussion about the topic

Discussion /5 min

2. Reading of the text / paper work / crossword

*Skimming for gist – scanning for info and further for specific info – extensive reading*

3. Vocabulary work / synonymous and antonymous expressions

Intensive reading – work with text (translation of some parts, summary…)

4. The article D Day Grammar / What tenses are used

Tenses pattern – Rew. of tenses - Murphy Grammar

Video - Film Fury – one part/6.20min

Fury /tanks Sherman versus Tiger

*https://www.youtube.com/watch?v=L8vFGQ0uJQc /10 min*

A. *What tenses are used in the video?*
B. *Change the scene into the past/future*
C. *Discussion / technical equipment used in the film*

*Students are expected to be able to show understanding of used grammar and vocab and to use it in different situations*

1. Murphy Grammar / Past Perfect, Present Perfect */10 min*

*After work on chosen exercises, feedback / right use of those tenses - homework*

2. CNN Navy ship listening part */ finding a piece of news from this field from previous* week *or better previous day*

*Video /10 min*

Listening part one – scanning, and two – extensive mode/search for information

Students are able to understanding information, attitude, they might enrich the topic with their own ideas

New vocabulary

Summary of the news

Students are able to give a review of the listening part, they can express their ideas *on required level…*

The real practice may slightly differ from the plan because of the student´s review of some news of the week or reaction on someone´s topic presentation, but I try to fulfil the lesson plan.

## CONCLUSION

We have been working with a growing number of students with learning disabilities at the university last years. The demands of University education are equal for all students, with or without learning difficulties. We must find ways to educate all students successfully, to create a fruitful learning environment. When working with students with learning disabilities, we feel more limits of time, exam and lesson plan demands and other bordering features, but we can make this education successful for every student who wants to learn. From "de Saussure times" we have tried to capture the core of communication as a crucial part of living in a human society. It has been cleared that the educational procedure is not thinkable without the right use of communicative skills in general. My focus is technically oriented education of foreign language with its weak speaking side and problems of learning because of disabilities. I am not saying I have found the remedy, but through catching the attention by choosing the right topics of wide range and creating an intriguing ambiance in the class, we might be quite satisfied with the results.

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