



Gaining Multiliteracy: Multimodal Approach to Foreign LSP Training

...Literacy teaching and learning needs to change because the world is changing [1]

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Abstract

The emergence of the hybrid multimodal paradigm of communication “makes use of different communication modes, transfers information via multiple channels and functions on different planes” [2]. The changes in the communication paradigm, in their turn, induce changes in the composition and structure of student’s professional portfolio. Therefore, the profile of a contemporary student of an engineering study programme contains a variety of competences, which s/he should possess. That is, apart from domain specific knowledge, a student should develop terminological competence addressing the issues of cultural sensitivity and linguistic diversity, which implies mastery of at least one foreign LSP, English in particular.

The necessity to acquire multiple languages within higher education study programmes not majoring in linguistics is governed by the fact that nowadays multiliteracy is no longer seen as a “pedagogical phenomenon” [3], but rather as a pedagogical necessity, as it is perceived as an important “general European value and criteria” (ibid). The concept of multiliteracy however has (r)evolutionized in the course of years, as it has developed into the phenomenon, which, alongside other things, concerns enhancing literacy in the foreign LSP by exploring cultural diversity in the multilingual environment for multimodal information transfer. In other words, contemporary language acquisition theories and practices are aimed at exploring “how to use the range of students’ linguistic repertoires and transcultural knowledge in the learning of any language at whatever level using multiliteracies perspective” [4].

The aim of the paper is by adopting a multimodal approach to foreign LSP learning to investigate the existing correlation between such competences as cognitive flexibility, skilled reading comprehension, and enhanced multiliteracy that engaged students should possess pursuing their academic excellence and achieving individual proficiency in the major.

Keywords: LSP, multiliteracy, multimodal approach, language competences, transcultural knowledge

Multimodal Approach: Creative Enhancement of Learning and Teaching

The necessity to constantly reconsider the existing approaches to learning and teaching process organization and implementation is substantiated by the demand of both teachers and students to employ academic methods that would contribute to enhancing their literacy, pursuing their academic excellence, and achieving individual proficiency in the major.

The nature and volume of communicated information makes teachers look for the most suitable student-friendly approach that would comply with the demands of the curriculum, stimulate professional advancement of the teacher, and simultaneously create safe and motivating learning environment.

The possibility of obtaining data via multiple channels invites considering different modes of communication as the necessary elements of the learning process in general and of the classroom work in particular. Various modes employed for meaning communication comprise, for instance, “images, colour, space, sound, movement and gesture” [5].

Nowadays, it may seem natural to apply video, audio, and/or textual sources for knowledge transfer within the framework of a particular study course. The challenge, however, is in proficient application of their complex interweaving and further presentation through a range of media [6].

Modern approach to teaching foreign languages for special purposes is inevitably multimodal, which, nevertheless, does not rely only on the versatile and exaggerated application of information technologies. Multimodal approach to organization of the teaching and learning process has nothing in common with unreasonable manipulating of information sources; it is about making efficient use of different modes of communication. “A multimodal approach is complex indeed, due to its

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interdisciplinary nature, drawing on diverse fields of enquiry such as educational history, sociolinguistics, design and perhaps primarily social semiotics" [7].

It means that the ultimate goal of adopting a multimodal approach in the linguistic classroom is to employ students' cognitive abilities to recognize process, memorize and apply information in a more efficient way, thus maintaining high student engagement rate and ensuring increased level of student success. In other words, multimodal approach to teaching and learning LSPs would contribute to creation of the learning environment, where students are cognitively engaged and are willing to make a psychological investment in learning [8], as well as "in understanding the material and incorporating or internalizing it in their lives" [9]. Therefore, employment of different modes contributes to raising involvement of the students and helps maintaining the focus in the classroom, thus promoting advanced levels of awareness and leading to higher quality learning process that "includes greater creativity and cognitive flexibility" [10].

The latter is of particular importance dealing with versatile and changing nature of the acquired and communicated information, as "with cognitive flexibility comes the ability to reason about two or more representations simultaneously" [11], which may take different linguistic or non-linguistic and/or combined forms, any of them, nevertheless, being treated as texts.

The principles of technology-enhanced education have influenced the very notion of recognized information source, shifting our perception of what is considered to be a text suitable for application in the classroom. Apart from the texts printed in different types of books, newspapers and magazines, the key texts today would be found on the web pages and web logs, networking services, advertisements, blogs, computer and console games, drawings and paintings, symbols and sound files. "Through the use and creation of multimodal texts, students have opportunities to use linguistic, visual and audio modes in order to experience, conceptualize, analyse and apply meaning" [12].

The interpretation of information encoded within these texts is to a large extent dependent on the "skilled reading comprehension, which requires individuals to make cognitive connections between various semantic aspects of text" [13]. It implies not only the ability to read and process information stated in the text, but to exploit prior knowledge and identify intertextual and even intermedial references to other texts, including those written in other languages, which demands making a particular emphasis on multiliteracy in the context of multimodal learning environment.

Gaining and Developing Multiliteracy

There is no consistency in the interpretation and application of the term multiliteracy [for additional information see [14], [15], [16]]. Traditionally, the term multiliteracy was employed either to denote one's literacy in more than one language and its cultural context, or to signify literacy in more than one medium of communication [17]. The necessity to acquire multiple languages within higher education study programmes not majoring in linguistics is governed by the fact that today multiliteracy is no longer seen as a "pedagogical phenomenon" [3], but rather as a pedagogical necessity, as it is perceived as an important "general European value and criteria" (ibid), which can help pursuing students' academic excellence.

Therefore, the concept of multiliteracy has (r)evolutionized in the course of years, as it has developed into the phenomenon, which in the context of the present research, alongside other things, concerns enhancing literacy in the foreign LSP by exploring cultural diversity in the multilingual environment for multimodal information transfer. It emphasizes the necessity for the 3G universities within the curricula to "...focus on the broader range of literacies ... draw attention to multiple modes of meaning making and communication (e.g., audio, visual, linguistic, spatial, performative) and how they can help students optimize their language and literacy learning" [18].

Nowadays, the profile of a student of an engineering study programme comprises a range of competences, which s/he should possess. Apart from having a domain specific knowledge, the student is expected to develop profound terminological competence, address the issues of cultural sensitivity and linguistic diversity, which implies perfect mastering of at least one foreign language for special purposes.

Within the multimodal learning environment, students are motivated to develop understanding of versatile literacies (visual, audio, digital, textual, etc.) in the multilingual and even multicultural context. The challenge for the teacher lies in the fact that all students within one group possess and aim at satisfying diverse literacy needs, which in its turn demands teachers to differentiate the study material, tailoring it to the individual abilities, interests and learning styles of the learners.

In attaining the abovementioned aims the academic staff of Riga Technical University face certain difficulties in integrating the principles of multimodal learning into their classroom work, which do not

depend on technological advancement, but rather on the readiness of the students to manipulate the acquired data and build on the prior knowledge and experience.

Within the ESP course, RTU students are assigned different tasks that require them to assess the acquired information from the multimodal perspective. One of such tasks concerns the development of a research project on a particular theme, within the framework of which students are required to demonstrate high level of cognitive flexibility, collecting data from multiple printed sources (textbooks, magazines, newspapers, and even comics), online sources (blogs, social networks, webpages, videos etc.) assessing their relevance and validity for the needs of research. The multimodal perspective is applied even for the presentation of the research overview and results. The reports have to be submitted to the teacher in the written form, they are further assessed by other students, as well as presented publicly during the class, making efficient use of versatile modes of communication.

Students are expected to quickly establish intermedial references to the prior knowledge and gained experience, which presupposes that they should possess advanced multimodal and multilingual reading comprehension skills. Within the framework of the study course, students are often asked to provide an in-depth analysis of video files. First, students watch a video on a particular theme specified by the teacher, analyse it in the written form and formulate several questions, the answers to which can be found in the video. Then in the second part of the lesson students have to watch some other students' videos on the same theme, analyse them in both written and spoken forms identifying similarities, differences, likes, dislikes, etc., provide answers to the questions and comment on the peer performance. This task is of particular importance developing data mining, recognition and evaluation skills; it also facilitates creation of a competitive learning environment.

The use of self and peer assessment within these tasks increases students' independence and responsibility; demands them to reflect critically, realising that they need a more advanced and deep understanding of the subject matter. Students are no longer passive participants of the classroom setting, they become active learners and assessors, thus adopting a more creative approach to learning.

Concluding Remarks

The diversity of information sources motivates students to adopt multimodal approach to data mining, expanding the range of communication modes applied. At the same time, it challenges them to search for facts and figures on the multilingual scale, which requires students to possess advanced multiliteracy. The necessity to consider the abovementioned aspects influences the changes in the nature of both LSP learner and trainer profiles.

It is especially challenging in the multicultural environment, where a trainer is a mediator not only between the learners and the acquired knowledge, but also between the learners and new cultural and linguistic setting. Therefore, development of such competences as cognitive flexibility and skilled reading comprehension forms an essential part of curriculum at all levels of tertiary education, fundamental and applied research as well as vocational traineeship. The multimodal approach to LSP training efficiently boosts the engagement rate, making students approach their study process creatively, pursuing their academic excellence, and achieving individual proficiency in their major.

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