Yerevan State University

TOPICALIZING LANGUAGE LEARNING IN ESL CLASSES

ABSTRACT

The study outlines the strategy for effective topicalizing of teaching material, and motivating graduate students in the language learning process, with a specific focus on the pivotal role of instructional materials in ESL classes. It is posited that the integration of intricate texts from narrow-specialized fields can serve a dual purpose: facilitating the teaching of linguistic fundamentals, at the same time stimulating meaningful discussions on professional topics. Based on extracts from W. Heisenberg's seminal work "Physics and Philosophy. The Revolution in Modern Science" it is demonstrated that by weaving these elements together educators can cultivate a learning environment that not only imparts language skills but also ignites students' enthusiasm and interest in their chosen filed.

Keywords: genre-specific language; syntactic constructions; English for Special Purposes; English for Academic Purposes

*e-mail: rkarapetyan@ysu.am

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023 Accepted: 22/12/2023

© The Author(s) 2023

РЕЗЮМЕ

ТЕМАТИЧЕСКОЕ ИЗУЧЕНИЕ ЯЗЫКА НА ЗАНЯТИЯХ ESL

В исследовании описывается стратегия эффективной тематизации учебного материала и мотивации магистрантов и аспирантов в процессе изучения языка с особым акцентом на ключевую роль учебных материалов на занятиях ESL. Утверждается, что интеграция сложных текстов узкоспециализированных областей может служить двойной цели: облегчать обучение основам языка и в то же время стимулировать содержательные дискуссии профессиональные Ha темы. основе отрывков ИЗ фундаментальной работы В. Гейзенберга "Физика и философия. Революция в современной науке" демонстрируется, что, сплетая эти элементы воедино, ппреподаватели могут создать учебную среду, которая не только прививает языковые навыки, но и зажигает энтузиазм и интерес студентов к выбранной ими спениальности.

Ключевые слова: жанровая специфика языка; синтаксические конструкции; английский язык для специальных целей; английский язык для академических целей

Received:06/12/2023 Revised: 15/12/2023

Accepted: 22/12/2023

© The Author(s) 2023

¹e-mail: rkarapetyan@ysu.am



ՍՎՈՓՈՓՍԱ

ԼԵՉՈԻՆԵՐԻ ՈՒՍՈՒՑՄԱՆ ԹԵՄԱՏԻԿԱՑՈՒՄ ESL ԴԱՍՐՆՏԱՑՆԵՐԻՆ

Հոդվածում նկարագրվում է կրթական նյութի արդյունավետ ուսուցման թեմատիկազման լեզվի գործընթագում lL ուսանողնորին մոտիվացնելու րազմավարություն՝ հատուկ շեշտադրելով Անգլերենը հատուկ նպատակների համար դասերի ուսումնական նյութերի առանցքային դերը։ Ենթադրվում է, որ մասնագիտացված ոլորտների րարձր ըարդ տեքստերի ինտեցրումը կարող է ծառայել երկակի նպատակի՝ հեշտացնել ւեզուների ուսուցումը, միևնույն ժամանաև խթանելով մասնագիտական թեմաների վերաբերյալ բովանդակայից քննարկումներ։

Վ. Հայզենվերի «Ֆիզիկա և փիլիսոփայություն. հեղափոխություն ժամանակակից գիտության մեջ» աշխատությունից հատվածների հիման վրա ցույց է տրված, որ այս տարրերը միավորելով՝ դասավանդողները կարող են ստեղծել ուսումնական միջավայր, որը ոչ միայն լեզվական հմտություններ կսերմանի, այլ նաև կխթանի ուսանողների ոգևորությունը ընտրած բնագավառի նկատմամբ։

Քանալի բառեր` լեզվի ժանրային առանձնահատկութուն; շարահյուսական կառույցներ, անգլերենը հատուկ նպատակների համար; անգլերենը ակադեմիական նպատակների համար

> Received:06/12/2023 Revised: 15/12/2023

> Accepted: 22/12/2023

© The Author(s) 2023

¹e-mail: rkarapetyan@ysu.am



INTRODUCTION

Restructuring language education to center around specific themes has become an indispensable approach in language teaching. ESL classes are a drastically unique and singular arena where efficacious choice of linguistic and topical material ensures that learning is not only linguistically rich but also contextually relevant. In view of the technological advance that placed humanity in a multiverse and fast-paced reality interplay of the two has been gaining traction at an accelerated speed. From this perspective the emphasis is to be made on selecting topics of genuine interest and practical value to learners, encouraging a holistic understanding of language skills. By integrating various language components such as reading, writing, listening and speaking within the chosen thematic framework, students engage in a more comprehensive language learning experience. This strategy not only fosters language proficiency but also cultivates a deeper connection between language acquisition and real-world application. Moreover, the use of authentic materials, cultural exploration, and project-based learning within the chosen themes enhances motivation, making the language learning process more dynamic and engaging for ESL learners.

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023

Axiomatically, language is learned and used in real and meaningful contexts, making it more authentic for students. This can enhance their ability to resort to the knowledge acquired in the

classroom while in practical, real-life situations. When it comes to ESL

and Academic English teaching, it is the scholarly setting situation in

the full range that are to be examined analyzed and presented at the

classroom with active and direct participation of students.

Below an attempt is made to showcase how highly complicated

texts for ESL students at the department of Natural sciences can be

utilized and put into effective implementation for students with

different levels of language proficiency.

To start, let us take a brief glimpse into how integration of content

and language learning was initiated and provide a theoretical outlook

by various scientists who contributed to the spread and adoption of the

given approach.

THEORETICAL OVERVIEW

Charles Carpenter was an outstanding American linguist who laid

the foundation of ESP in his seminal work "Linguistics and Language

Teaching" (1945). In this book he discussed the need for a communicative

approach to language instruction. While Fries did not explicitly address

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons
Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023

Revised: 15/12/2023

ESP, his ideas about teaching language in meaningful contexts and considering the communicative needs of learners have influenced the development of ESP as a field of study.

John Swales, a prominent figure in ESP, particularly for his work on academic discourse and genre analysis addressed the specific linguistic features and communicative needs of various academic and professional disciplines. His seminal work "Genre Analysis: English in academic and research settings (Swales, 1990)" has had an enormous impact on academic writing in particular, and on pedagogic practice in general. The author states: "The main aim of this book is to offer an approach to the teaching of academic and research English. The approach develops and makes use of three key concepts: discourse community, genre and language-learning task. One of the purposes of the book is to discuss these concepts in sufficient detail to reach a clearer understanding of how they have been and may be employed. Additionally, the book attempts to demonstrate the general value of genre analysis as a means of studying spoken and written discourse for applied ends. In particular, it tries to show that a genre-centered approach offers a workable way of making sense of the myriad communicative events that occur in the contemporary Englishspeaking academy – a sense-making directly relevant to those concerned with devising English courses and, by extension, to those participating in such courses." (Swales, 1990:3)

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023

Afterwards, in 1980s, Hutchinson and Waters introduced the concept of "needs analysis" in ESP. They emphasized the importance of understanding the specific language needs and objectives of learners in order to design effective and relevant language courses for professionals.

ESP field being a continually developing domain, J. Swales coauthored with Ch.B. Feak and generated influential works on academic writing in English for Academic Purposes (EAP). Their publications provide guidance on writing genres specific to academic disciplines, making a significant impact on ESP methodology. This is a hands-on work used as a guide for graduate students who are learning academic writing skills, including how to write research papers, theses and dissertation. The book addresses various aspects of academic writing, such as language use, genre analysis, and the conventions of academic discourse.

Dudley-Evans and St. John have contributed to ESP through their work on course design and methodology. Their book "Developments in English for Specific Purposes. A multi-disciplinary Approach" addresses practical aspects of ESP instruction, being a symbiosis of English for Academic and English for Occupational Purposes, drawing both on theoretical and practical perspectives.

Received:06/12/2023 Revised: 15/12/2023

Accepted: 22/12/2023

© The Author(s) 2023

¹e-mail: rkarapetyan@ysu.am



In 2001, responding to the overwhelming number of articles in ESPJ and elsewhere on academic texts, students, and contexts, Liz Hamp - Lyons and Ken Hyland established the Journal of English for Academic Purposes (JEAP). Though there are many examples of ESPJ - like articles in this journal, two will be offered as evidence here. In 2004, Samraj B. examined the discourse features of graduate student research papers "in order to increase our understanding of this heterogeneous genre and the dimensions along which it can vary across sub - disciplines" (2004:5).

This stance is of special importance to the given work, since below we focus on highly intricate texts of W. Heisenberg's "Physics and Philosophy. The Revolution in Modern Science" and showcase some of the modes it can be used in ESL classroom to develop different skills, such as reading and comprehension, enriching EAP vocabulary and elaborating on genre-specific complicated syntactic constructions, as well as honing speaking and debate skills, triggering professional interest and engagement.

PRACTICAL APPLICATION IN CLASSROOM AND ITS IMPLICATIONS

Werner Heisenberg's seminal work "Physics and Philosophy", published in 1958, delves into the foundational principles of the natural

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023

world, which constitute the bedrock of essential physical processes. These principles remain immutable and indispensable to scientific breakthroughs, transcending technological and engineering advancements. The work offers a profound exploration of the captivating realm of quantum physics, a domain which dominates the intellectual pursuits of scientists and holds the promise of unraveling the very fabric of the universe.

Beyond its scientific discourse, the work is imbued with a profound philosophical perspective, stimulating contemplation and fostering active engagement among students in academic setting. Linguistically, the text manifests a highly sophisticated and advanced stylistic tenor. Characterized by special lexicon, notably enduring in its relevance, and intricate syntactic constructions, the narrative is replete with genre-specific linguistic basis. Its rich tapestry of language encompasses advances and erudite registers, in line with the exigencies of English for Academic Purposes.

Therefore, the chosen material serves dual purposes: addressing the professional proclivities and intellectual interests of students while concurrently augmenting their interest and motivation. Simultaneously, it provides a platform for the cultivation and refinement of advanced language competencies, thereby elevating the discourse within the academic sphere. Below presented are some of the assignments that can be

¹e-mail: *rkarapetyan@ysu.am*



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023

applied to developed EAP skills of students in ESL classes for Natural Sciences departments. Particularly, specific tasks for developing linguistic and professional discussion skills on the basis of a concrete text will be proposed and discussed. Let us consider the following passage from the book along the lines defined above:

In 1885, however, an experiment performed by Michelson and Morley revealed a fact which should not exist were the theoretical assumptions of Newton the whole truth. This made it evident that the relation between the physicist's experimental facts and his theoretical assumptions is quite other than what Newton had led many modern physicists to suppose. When, some ten years later, experiments on radiation from black bodies enforced an additional reconstruction in Newton's way of thinking about his subject matter, this conclusion became inescapable. Expressed positively, this means that the theory of physics is neither a mere description of experimental facts nor something deducible from such a description; instead, as Einstein has emphasized, the physical scientist only arrives at his theory by speculative means. (Heisenber W. 1958:3)

> Received:06/12/2023 Revised: 15/12/2023

> Accepted: 22/12/2023

© The Author(s) 2023

¹e-mail: rkarapetyan@ysu.am



For the linguistic plane purely, attention of students is invited to

the first sentence, which is quite an advanced use of a complex sentence

in the subjunctive mood. For example, students can be asked to study

the example and make up new meaningful sentences related to science,

research and technology exploiting the same syntactic construction.

Point in case:

a) Many modern methods of medical treatment should not

exist were it not for the discoveries of Nuclear Physics;

b) Fundamental understanding of our genetic makeup and

DNA should not exist were it not for the Human Genome

Project.

The list can be continued by students and the instruction may

proceed to cover additional constructions which express subjunctive mood

or conditional sentences.

On the professional level, students at the department of Physics are

extremely excited to discuss the transition/differences of Newtonian,

modern and quantum Physics. They can be asked to present a research

project, or organize discussions to enlighten this topic, which is epitomized

in the example above by "When, some ten years later, experiments on

radiation from black bodies enforced an additional reconstruction in

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons. Attribution-NonCommer-cial 4.0 International License. Received:06/12/2023

Revised: 15/12/2023 Accepted: 22/12/2023

© The Author(s) 2023

Newton's way of thinking about his subject matter, this conclusion became inescapable".

Another extract from the book to serve some didactic purposes:

This, however, is impossible or at least not entirely possible because of the nature of the atomic phenomena, as has been discussed in some of the earlier chapters. It cannot be our task to formulate wishes as to how the atomic phenomena should be; our task can only be to understand them

When one analyzes the papers of the first group, it is important to realize from the beginning that their interpretations cannot be refuted by experiment, since they only repeat the Copenhagen interpretation in a different language. From a strictly positivistic standpoint one may even say that we are here concerned not with counterproposals to the Copenhagen interpretation but with its exact repetition in a different language. Therefore, one can only dispute the suitability of this language. One group of counterproposals works with the idea of "hidden parameters." Since the quantum-theoretical laws determine in general the results of

Received:06/12/2023 Revised: 15/12/2023

Accepted: 22/12/2023

© The Author(s) 2023

¹e-mail: rkarapetyan@ysu.am



an experiment only statistically, one would from the classical

standpoint be inclined to think that there exist some hidden

parameters which escape observation in any ordinary

experiment but which determine the outcome of the experiment

in the normal causal way. Therefore, some papers try to

construct such parameters within the framework of quantum

mechanics. (129-130)

The following extract is a superb piece of text to focus on hedges and

tentative speech which is crucial in expressing scientific standpoints,

especially if they are innovative or not widely accepted yet. Hence the

students may first discern the expressions such as - this, however, is

impossible or at least not entirely possible because of the nature..., therefore,

one can only dispute the suitability of this language..., one would from the

classical standpoint be inclined to think that there exist some hidden

parameters and then be offered to come up with some new ideas in relevant

spheres using these expressions.

Another interesting extract:

In Greek philosophy the problem of the concepts in

language has been a major theme since Socrates, whose life

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons
Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023

Revised: 15/12/2023 Accepted: 22/12/2023

© The Author(s) 2023

was—if we can follow Plato's artistic representation in his dialogues—a continuous discussion about the content of the concepts in language and about the limitations in modes of expression. In order to obtain a solid basis for scientific thinking, Aristotle in his logic started to analyze the forms of language, the formal structure of conclusions and deductions independent of their content. In this way he reached a degree of abstraction and precision that had been unknown up to that time in Greek philosophy and he thereby contributed immensely to the clarification, to the establishment of order in our methods of thought. He actually created the basis for the scientific language.

On the other hand, science must be based upon language as the only means of communication and there, where the problem of unambiguity is of greatest importance, the logical patterns must play their role. The characteristic difficulty at this point may be described in the following way. In natural science we try to derive the particular from the general, to understand the particular phenomenon as caused by simple general laws. The general laws when formulated in the language can contain only a few simple concepts—else the law would not be simple and general. (169-170)

Received:06/12/2023 Revised: 15/12/2023

Accepted: 22/12/2023

© The Author(s) 2023

¹e-mail: rkarapetyan@ysu.am



The deliberations above may serve as a prolific background for analyzing the role of language in expressing scientific thought. Given the topic is touched upon in a prominent and foundational work in Quantum theory, this will definitely arise more interest and trust among students of Natural sciences. An extract is a perfect tool to engage students in the discussions over the interrelation between language and science. In this sense, language should be presented as an only mode to carry their views through: a very stimulating and motivating factor to learning the language in

CONCLUSION

general, and subsequently to focus on the academic register.

The overview presented above is a tentative plan how to motivate and engage graduate students in the language learning process. Particularly, it discusses the importance of material upon which the ESL classes are conducted. It has been shown that intricate texts from a narrow-specialized field can be intertwined for the joint purpose of teaching purely linguistic material, on the one hand, and sparking discussions over professional topics, thereby stimulating motivation and interest of students.

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023

BIBLIOGRAPHY

- Dudley-Evans and St. John "Developments in English for Specific Purposes. A multi-disciplinary Approach", Cambridge University Press, 15th ed., 2012.
- 2. Heisenberg W., "Physics and Philosophy. The Revolution in Modern Science", New York, 1958.
- 3. Hutchinson, T. and Waters, "English for specific purposes: A learning-centered approach", Cambridge: Cambridge University Press, 1987
- 4. Samraj, B. (2004) Discourse features of the student produced academic research paper: Variations across disciplinary courses // *Journal of English for Academic Purposes 3:5–22.*
- 5. Swales, John M., "Genre Analysis. English in Academic and Research Settings", Cambridge University Press, 2008
- 6. Swales, John and Ch.B. Feak "Academic English for Graduate Students. Essential Tasks and Skills", Michigan University Press, 3 ed., 2012

Ռուզաննա Կարապետյան-բ.գ.թ., դոցենտ անգլերենի թիվ 1 ամբիոն, Երևանի պետական համալսարան

Ruzanna Karapetyan-PhD, Associate Professor, English Language Chair N 1, Yerevan State University

Рузанна Карапетян-к.ф.н., доцент кафедры английского языка N1, Ереванский государственный университет

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023

Ներկայացվել է խմբագրություն՝ 30.11.23, տրվել է գրախոսության՝ 06.12.23 - 15.12.23, երաշխավորվել է ԵՊՀ եվրոպական լեզուների և հաղորդակցության ֆակուլտետի անգլերենի թիվ 1 ամբիոնի և պարբերականի խմբագրակազմի կողմից, ընդունվել է տպագրության՝ 22.12.23։

¹e-mail: rkarapetyan@ysu.am



This work is licensed under a Creative Commons Attribution-NonCommer-cial 4.0 International License.

Received:06/12/2023 Revised: 15/12/2023 Accepted: 22/12/2023 © The Author(s) 2023