Book review

PROFESSIONAL ENGLISH IN IT - PERSPECTIVES OF DISCIPLINARY LITERACY DEVELOPMENT FOR UKRAINIAN STUDENTS

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The *Professional English in IT* textbook written by Oksana Krasnenko, Maryna Rebenko and Liudmyla Kucheriava has been tailored for B2-B2+ students completing their 4th year of undergraduate study in Intellectual and Information Systems, Cyber Security and Information Protection, Software Systems and Technologies, Applied Information Systems, Networking and Internet Technologies, and Technology Management. Guided by the recent trends in ESP/EAP methodology, the *Professional English in IT* responds to challenges of contemporary education and students' personal needs. The textbook aims to develop and enhance the English professionally oriented competencies, such as speaking, reading, and writing. All unit topics are relevant, informative, and the best for the learners who want to keep their job-focused knowledge up-to-date. The integrated content allows IT students to accomplish specific academic and workplace tasks as well as to develop such essential soft skills as communication, collaboration, critical thinking, and creativity. The student-centred activities integrated into each unit help students become confident lifelong learners in the huge world of global communications and technologies. The textbook under review is appropriate for IT students of technical schools, colleges, and higher education institutions willing to raise their awareness in the field of ESP. It could be also applied in both offline and online ESP classrooms targeting to boost students' content-based knowledge improvement.

The *Professional English in IT* has been prepared in close collaboration with the subject lecturers of the IT Faculty. Most conceptual textbook material is relevant to the national curriculum and features the ESP syllabus framework for the 4th year IT and Computer Science students. The textbook teamwork targeted to match learners' collective as well as personal disciplinary literacy needs, according to the international and university educational goals. The unit scope design involved the authors in the eight-step process: examining student learning needs; clarifying the goals and objectives to teach literacy across the discipline; identifying gaps in students' career readiness; developing relevant learning materials; completing the content-based textbook units; reflecting student performance successes and failures; and

improving teaching materials expertise through evaluating the textbook approach strengths and weaknesses.

The textbook encompasses ten content-based topics, revealed in the following units: Information Systems (pp. 7–13), Database Management Systems (pp. 14–20), Computer Networks (pp. 21–27), Networking Media and Hardware (pp. 28–34), The Internet and the World Wide Web (pp. 35–40), Online Communication Morality and Security (pp. 41–47), Cryptology in the Computer Era (pp. 48–53), Multimedia and the Web (pp. 54–59), E-Commerce (pp. 60–66), and Green Technologies (pp. 67–74). It opens with the Preface (p. 6) that introduces the textbook structure and purposes. The textbook includes two Appendices: Computer Science and IT Acronyms (pp. 75–78), and Texts on Pleasure Reading (pp. 79–117). There is an extensive list of references of the key papers to fit the further purposeful reading. The structure of a textbook unit is as follows:

Unit Title
A. Discussion Starters Section
B. Before You Read Section
C. Reading Section
D. Comprehension Check Section
E. Use of Language Practice Section
F. Student Web Research Activity Section
G. Speaking Tests Section
H. Home Writing Assignment Section.

The Discussion Starters Section helps students get into a learning frame of mind. The topic is introduced through a set of images to describe, reflect on, and share. Such visuals aim to attract students' attention to the topic, keep them engaged in training activities and initiate fruitful classroom discussion. The Before You Read Section covers a couple of reflective questions to develop the theme and generate ideas. This is followed by the Reading Section featuring authentic articles and essays to contribute to students' reading skills enhancement. The follow-up part, Comprehension Check, assumes to facilitate knowledge representation on the specialized text content. Students are assigned either to respond to the comprehension questions or make up their issues to shed light on the central ideas for the afore. Then, in Section E, they accomplish Use of English tasks to practice and expand target vocabulary. Enhancing a reservoir of hard and soft skills, learners work on matching, word-formation, gap filling, synonym-antonym, sentence ending suggestion, true-false, agree-disagree, and other activities. Most assignments correlate to the Graduate Test on ESP, so student pre-exam acquisition turns a challenge into enjoyable experience. Aimed at successful independent study, the Web Research Activity Section involves students' ability to manage online information for an assignment topic. It boosts students' self-directed learning skills to organize the obtained information in a self-developed project, and encapsulate its key ideas at the classroom. It is assumed that such compilation of the acquired knowledge and project-making learning experience develops learners' critical and reflective thinking essential for disciplinary literacy strategies. Next, the Speaking Tests Section features a set of comment require open-ended questions and/or visuals on mindful conversation topics for deeper in-class connection. Such integrated assignments keep expanding learners' vocabulary, enable them to monitor and reflect on their learning, encourage them to prove their point of view, participate in a debate, and implement their own experience. In addition to contributing to students' language professional development, this technique equips an ESP teacher with effective tools for evaluating a student's efficiency level of content-based communication. The end-of-unit section is a Home Writing Assignment tied to motivate students to think, analyse, compare and produce a strong logical case on the unit topic. In ESP settings, a home writing task encourages learners to make a reasonable

generalization, reach conclusions and apply what has been learned through an effective writing environment. Hence, this section makes an asset phase of the unit learning outcomes.

For instance, Unit 3 *Computer Networks* introduces the Discussion Starters Section with a topic-related question-and-image description and commenting assignment. Students are assigned to describe the image, exchange their opinions on how videoconferencing and telecommuting have changed our world. This activity enables learners to activate their background knowledge, arouse interest in the topic, launch vocabulary expansion, and as a result, strengthen analytical skills. In the Before You Read Section of Unit 3, learners are asked to define the notion of "a computer network" on their own and to share expectations on the further-given article *Intent-Based Networking.* It targets to apply reflective practices and motivate integrating students' imagination and critical thinking on what they are going to study.

In the Comprehension Check Section of Unit 4 *Networking Media and Hardware,* students respond to the text-dependent questions. They keep reflecting and expressing their ideas on the impact of 5G technology on future life.

In the Use of Language Practice Section of Unit 7 *Cryptology in the Computer Era,* learners are supposed to mark the statements as true, false or not given and make false ideas correct following the article *Privacy and Computers*. They are involved in completing the summary on *Privacy and Computers* with the suggested linking word combinations. Next, students keep expanding their vocabulary bank by matching a list of key verbs from the article to their synonyms. In the next use of language assignment, learners work on a gapped text filling in the spaces with a suitable word form. They end up making up sentences of their own using suggested word combinations from the text. A natural context of such content-based task cycle creates a real purpose for professional language use and generates students' productive preparation, training, reflection and feedback within the naturally arisen professional linguistic culture.

In the Web Research Activity Section of Unit 9 *E-commerce,* students work in teams. They have to choose one of two issues and prepare a one-page summary as collaborative writing in Google Documents or a presentation in Google Slides. Some questions are given to help them explore additional information in-depth.

The Speaking Test Section G is designed to boost effective job-focused communication. Pushed to the limits of their language skills, learners are engaged in reflecting and discussing topical issues. Toward the end of each unit, there is a purposeful writing task. In the Home Writing Assignment of Unit 8, *Multimedia and the Web* students are supposed to prepare an argumentative essay on the topic *The Possible Use of Web-Based Multimedia in the Future.* Such a meaning-making activity enables learners to expand their control in professional language, promotes extensive critical thinking and decision making, and thus, leads to up-skill learners with learning for understanding experience.

Appendix 1 provides learners with the glossary of the most common Computer Science and IT related acronyms, particularly the shortened forms of the frequently used terms, email abbreviations, and emoticons. Appendix 2 supplements each unit with two-three thematically related texts. The self-learning approach of the appendices content reinforces students' interest to broaden their knowledge and advance their proficiency in ESP.

Designed for Computer Science and IT undergraduates, this 118-page textbook in professional English is logically structured and consistently written. Formally approved by the Faculty of Information Technology, the textbook was published by the National University of Life and Environmental Sciences of Ukraine in 2019. The authors have managed to handle a challenging task – to cross various disciplines such as Information Systems, Networking Media and Hardware, Cryptology, E-commerce, and more within one expertise. The topics designed in the textbook framework meet both the ESP course curriculum requirements and more importantly, learners' needs due to the increasingly developing IT core sphere. Each unit covers the content and language

in equal measure aimed at preparing students to enter the workforce with high-demand hard and soft skills.

The textbook unit activities are worked out to reflect the topics encompassed in the unit articles and are synchronized with the unit sections progressing. Targeting to engage the students in pre-, while- and post-reading tasks, encourage performing subject-matter situations in teams, working out projects and completing writing content-based assignments, the *Professional English in IT* scope enables learners to integrate the acquired educational material into the focused practical knowledge and to have a significantly wider range of skills.

The *Professional English in IT* motivates students to be open to learning, set clear goals, build an extensive vocabulary, reflect on purpose and make decisions upon plans, take initiative in teamwork and think critically doing research. As a result, such content learning boosts job-focused language proficiency acquisition and fosters discipline literacy competence. All the aforementioned endeavours prove the relevance and value of the *Professional English in IT* textbook within the ESP course for students of IT and Computer Science in the international tertiary education settings as a whole and the Ukrainian case in particular. The *Professional English in IT* application is partly limited. Since the textbook unit framework lacks audio and video training materials, students' listening comprehension development could suffer. On the other hand, in post-pandemic reality, the unit scope design might be powerful university closure activities conducted in at-home environments and targeted students' self-control and self-development as one of the learning outcomes.