Incorporating Critical Thinking in FLT

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Abstract. Critical thinking is of crucial significance in the modern world. It is considered to be one of the most important skills for people living in the XXI information century. It makes people able to reflect on the flood of information they get, to analyze, evaluate, and create it, understanding what is true and what is false. The process of developing critical thinking skills should start at school and be continued at university, using the potential of each and every subject. The authors of the article reflect on critical thinking integration in foreign language teaching (FLT) and share some practical ideas and experience, presenting a particular example of developing university students' critical thinking skills in an English language classroom.

Keywords: active learning, critical thinking, FLT, reflection, Socratic method.

Introduction. The question "what to teach" and how to teach this "what" with the rational of "why" has always been on the agenda of teaching/learning process. The XXI century has brought new challenges with the flow of information that has been flooding today's life. It is rather hard to navigate in it, to understand what is right and trustworthy, and what is wrong, manipulative or fake. People may ask, and it is quite logical, if there are some thinking rules that will protect and guide information users, some mechanism that will help understand, evaluate, make judgements and right decisions. This mechanism exists. It is reflecting on the information obtained and critical thinking. People should learn and be taught how to become critical consumers of this huge amount of information poured on them with every passing day. Thus, it seems that it is time to reconsider methodology and teaching practices.

Literature review and discussion. Critical thinking, *i.e.*, a specific skill applied when processing information, is not a new term and is known to educators. However, it is today that it has got a second breath and is considered to be one of the four main skills, together with the other three "C" - Creativity, Collaboration, and Communication, required for professionals in the XXI century, as Trilling and Fadel remark [15,206]. Many years ago, Albert Einstein said, "Education is not the learning of facts, but the training of the mind to think." These words are still topical as knowledge is no longer something "given from the outside; it is a personal construction in which the individual imposes meaning by relating bits of knowledge and experience to some organizing schemata" [10,130]. People should critically process the information they receive, create and forward to others.

Due to the development of technology, the amount of information people get when reading, watching, listening, and speaking increases exponentially. However, it happens that educators as well as employers complain that their students or recent university graduates are passive receivers of this massive information. They lack reasoning skills and are not able to process the information they perceive. They are not able to distinguish facts from opinions, accurate information and reason from bias and fake to make proper decisions while solving problems [5,72; 9].

Modern information is imposed on; modern media present information to persuade, to challenge and change opinions, and not always in an objective unbiased way. Thus, it is evident that the skill of reflecting on information, ability to process it critically is important, and not only for students in academic area when they work on their research, analyze and evaluate facts, opinions, results, etc. It is also required for professional achievements and in everyday life which poses a lot of questions. People have to think over and decide how to preserve the environment and what is the best experience of countries-environmentalists, what causes the spread of coronavirus and pandemic, whether it is the malice of leading pharmaceutical companies to raise their profits as some politicians and media publications present it, whether it is necessary to be vaccinated against it and what vaccine to choose. As Debela puts it, "turn on your TV, read a newspaper, listen to an advertisement on the radio, and you will notice how many dubious claims are out there that cannot sustain the scrutiny from minds accustomed to critical thinking" [5,73].

One of the most fundamental definitions of critical thinking belongs to Scriven and Paul, "critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness" [12]. Another definition is presented by Halpern, "critical thinking is the use of those cognitive skills or strategies that increase the probability of a desirable outcome. It is used to describe thinking that is purposeful, reasoned, and goal directed" [7,4]. Both definitions highlight the main concepts of critical thinking which is a kind of interaction with information, "identifying arguments, weighing evidence, evaluating sources, looking for conflicts of interest, and questioning underlying assumptions" [14,4]. In other words, "critical thinking involves the process of healthy skepticism which itself involves the processes of questioning, reasoning and evaluating information before reaching the final decision. We dare say it is a path to freedom from half-truths, prejudices and consequently acts as a liberating force from dogmatic fallacies" [6,334]. According to Schafersman "critical thinking means correct thinking in the pursuit of relevant and reliable knowledge about the world. Another way to describe it is reasonable, reflective, responsible, and skillful thinking that is focused on deciding what to believe or do. A person who thinks critically can ask appropriate questions, gather relevant information, efficiently and creatively sort through this information, reason logically from this information, and come to reliable and trustworthy conclusions about the world that enable one to live and act successfully in it" [11,3].

Reflecting on and summerizing the above makes it possible to conclude that critical thinking helps students understand their own opinions, values, and believes as well of those of other people; it is free from bias, and helps examine assumptions, distinguish facts from opinions, explore alternatives [16,37-38] and, as a result, solve problems effectively. It is based on certain "universal intellectual values": clarity, accuracy, consistency, depth, breadth, and fairness [op.cit].

However, on the other hand, it often happens, and in Ukrainian reality too, students cannot process information and deal with it from a deeper prospective. There is confusion in heads, unwillingness to think, evaluate and to make important choices though such abilities are of utmost importance for the country which is making fateful decisions.

Following Brookfield, it is reasonable to state that "the development of critical thinkers as a ... priority for both civic and economic reasons" [2,3] and, thus, one the main components of education, especially university one, that **should** focus on developing students' critical thinking skills. That will enable students to re-examine with a reasonable doubt what seems to be obvious, to re-evaluate assumptions, and to analyze alternatives before making final decisions and constructing content.

It is evident that the development of critical thinking skills is not a privilege of some particular subject. Critical thinking may and should be widely applicable "across all the curriculum" [7,1997], including FLT where "critical thinking underlies the basic skills of reading, writing, speaking, listening and communication. It is in these language areas that students can have opportunities to engage in critical thinking process" [6, 333].

No one disputes the above statement about the need to develop students' analytical and critical thinking skills. However, it often happens that in FLT practice, it is "handled in an ad hoc rather than systematic manner" [3,423], that the integration of language and thinking skills has been peripheral [13,112]. That happens due to a number of challenges faced by foreign language teachers such as limited vocabulary and weak grammar skills of students, lack of developed thinking skills as a legacy of prior school education, and/or syllabus and curriculum time constraints. It often happens that foreign language teachers are quite happy and satisfied when their students have mastered some basic grammar, and their vocabulary is at B1+ level. This level of language proficiency allows students to perceive explicit, factual information contained in the text, but, at the same time, makes them ill-equipped with the skills required for fulfilling even basic communication transactions [8,22] and with more sophisticated thinking skills and strategies for processing implicit information. "Engagement in the language learning process happens when a link is created between language study and the outside world. Students see no reason to engage in learning if the outcomes are not relevant to their lives or if, in the case of language study, the focus of study does not further their own desire for communication and self-expression. As students gain a deeper understanding of content area and its connection to self and society, their investment in their own learning increases" [*Ib.*, 36].

Today, contrary to what it was in the recent grammartranslation past, students need and learn foreign languages to apply them in their real-life professional and every-day communication as a tool for explaining reasons, comparing and evaluating, expressing emotions, feelings, and attitudes. They use the foreign language to present grounded arguments, make decisions, solve problems, posed by life, and to create. More than that, researchers have proved that critical thinking skills help foreign language learners "in language acquisition, particularly increasing problem-solving abilities, communication skills, writing competence, and student motivation" [9]. They get the ability to reflect on their learning, evaluate it and make it more successful. This way they develop responsibility for their results and achievements and become more motivated. Studies in methods of FLT have confirmed that critical thinking skills improve students' foreign language proficiency, reading, writing and oral communication skills [8; 3]. "Language learners with critical thinking ability are capable of thinking critically and creatively in order to achieve the goals of the curriculum; capable of making decisions and solving problems; capable of using their thinking skills, and of understanding language or its contents; capable of treating thinking skills as lifelong learning; and, finally, intellectually, physically, emotionally and spiritually wellbalanced" [13,112]. Dealing with real, vital issues stimulates language learning far better than traditional for FLT topics like "Your Working Day" or "Sights in Your Native Place." Critical thinking is and should be taught at ELT classes and mastered by students.

Classroom FLT activities offer students multiple opportunities to become independent learners, to share their ideas, reflect upon their learning, and engage in extended, unrehearsed communication with peers and teachers. Using authentic English materials, students are able to "present their thinking and research in much the same manner as they will be called upon to do in their future academic and professional lives" [8,23]. There are different ways, forms, and techniques to develop critical thinking skills. They are any forms of active learning based on using different cognitive processes that make students cooperate, such as discussions, debates, projects, case studies simulating reallife or future probable professional situations, conferences, writing essays, etc. They engage different levels the cognitive domain, such as understanding, analyzing, evaluating, and creating (Bloom's taxonomy of cognitive domains). They employ high-order thinking skills to activate and apply prior knowledge to predict events or actions that may happen or be caused in future, analyze to determine the nature or relationship, synthesize to produce and combine, compare and contrast to note similarities and differences, evaluate and consider something carefully in order to decide whether it is good or bad, etc. However, first and foremost, critical thinking is about asking and answering question, asking the right, thought provoking questions by the teacher and developing similar skills among students.

There are various classifications and lists of questions compiled by researchers, for example, the one presented below [9]:

<u>Questions to clarify (What did you mean by...? Can you</u> give me an example? Could you explain a bit more?

<u>Questions to challenge assumptions (</u>Why do you assume that...? Is that always the case? Why do we include and exclude ...?

Questions to probe evidence/reasons (What do you think causes this to happen? How do you know this? Why do you say that? What are some possible consequences of this? How does ... affect ...? How does this tie in with what we already know?

<u>Questions about questions (</u>Why did you ask that question? What did you mean when you said ...? What are you trying to find out with that question?

The questions, widely used when applying Socratic method of teaching, help activate prior knowledge, observe relationship, analyze significance, compare and contrast, view things from another perspective, question and evaluate one's assumptions, rebuff arguments, thus contributing to understanding the subject better.

Materials and methods. Ideas presented above help to work out the rational for a lesson which incorporates a critical thinking element. As an example of the practical application of critical thinking, and as a result of the collaboration with the online course Integrating Critical Thinking Skills into the Exploration of Culture in an EFL Setting (copyright by World Learning, sponsored by the U.S. Department of State and administered by FHI 360) [16], the authors of the article developed the plan of the lesson Pollution and Energy Crisis (Module 6, Theme 26 according to the University syllabus) for the group of students they teach: 3-year university students, 19-20 years old, with B2-C1 English proficiency level; major subject English (English Philology and Translation) Appendix 1. The developed lesson plan, the implementation of it at the real lesson, the analysis and reflection on the results allowed the authors to compile a list of recommendations for conducting lessons with elements of critical thinking in **FLT** university classroom. Though recommendations do not claim to be the universal and ultimate truth, they are reflection on the authors' experience and an attempt to enhance students' critical thinking within the university course of FLT.

1. The theme of the lesson should be topical and controversial in the society, and, at the same time, interesting to students. The theme of the lesson presented in Appendix 1 was chosen due to a number of problems caused by environment pollution, especially in the post-soviet countries. It happens that lots of people, students included, are not environmentally-minded, do not care about the environment and think they cannot do anything to make it better as protecting environment is the responsibility and task for the government, plants and factories. To address the challenge, the lesson demonstrates a lot of examples of environmental protective actions, and a lot of questions posed in the tasks are to stimulate students' reflection and critical thinking.

2. However, teachers should be careful choosing themes to present and discuss. They should motivate students to think critically, to analyze, evaluate deeds and ideas, but

should not provoke furious argument, altercation and contention. In order to make students reflect, the theme should not be imposed on them, but show alternatives which may force them to reevaluate assumptions.

3. The lesson should work on different components of critical thinking: observation, analysis, interpretation, reflection, evaluation, inference, explanation, problem solving, decision making, creating, etc. It raises students' awareness of their own views, opinions, assumptions, values and believes, and makes them being interested in the experience of other countries and other cultures. Admitting diversity and developing empathy with people from all over the world, students understand the expedience of borrowing their positive experience.

4. The materials used at the lesson should be variable and reflect different points of view and opinions in order to avoid getting into a filter bubble. The designed lesson comprises various video materials, articles, exercises demonstrating experience of environmentalists from a number of countries and presenting different points of view. Multifarious values and believes offer alternatives to what is experienced in Ukraine and a lot of ways of dealing with environmental problems. Tasks and questions help students observe, analyze, interpret, reflect, evaluate, infer, explain, solve problems, and discuss. They have plenty of opportunities to share their points of view. Unfortunately, not a lot has been done so far to protect the environment in Ukraine. The country is experiencing problems at the moment, and people try to survive. They think that environmental cause may wait. Still, the lesson definitely makes students understand that a lot depends on them themselves; they are agents of change and are responsible for the country. If they are environmentally friendly, the country will be a safer and more pleasant place to live in.

5. The lesson should include the "creation" stage, the outcome of the critical thinking process. It may be essay writing, projects, presentations, etc. which make it possible for the teacher to understand whether the message has been received by the students and the outcomes achieved. The lesson which was conducted definitely raised the students' awareness. They demonstrated it when presenting their own projects: in mini-groups of 2-3 people they were to collect information and get ready with presentations What I Personally Can Do to Protect the Environment in Ukraine what they made at the next lesson. The topics of students' projects, their decisions and conclusions were deeply thought over and independent; the students' assumptions were challenged, questioned and checked. The outcomes of the lesson, students' answers, and after-the-lesson tasks demonstrated that the students got the message.

To assess the results – students' critical thinking skills, the authors made an attempt to develop the assessment tool as "I can do" statements.

Conclusion. Developing university students' critical thinking skills is a timely, but challenging issue. Reflection and critical thinking skills can and should be fully explored, enhanced and developed at foreign language classes as well as by each and every subject for students to be responsible for their learning, to be able to think critically, with a reasonable doubt, when making right decisions. It is vital to prepare them for life in the modern globalized world. Students need something more than just knowledge and purely professional skills to participate fully in an

international society [8, 22] and to make good citizens. If students are introduced to critical thinking and have an opportunity to develop the skills, they will employ them beyond the classroom too, life-long, when making important independent decisions.

Appendix 1. Lesson plan *Pollution and Energy Crisis* for university students, 19 - 20-year olds, B2-C1 English proficiency level; lesson length 1.5 hour

Teacher's Objectives / Student's Outcomes: By the end of the lesson, students will be able

- to critically think of some of the environmental problems the humanity is facing
- to speak about problems, expressing their views and opinions
- to reflect on and understand the experience of other countries
- to raise awareness of the pollution problem and to reflect on the things that can be done to protect the environment
- to develop presentation skills
- to build up the vocabulary on the topic
- to develop the ability to express oneself when speaking, listening, reading, writing

1 (2 min) Warming up.

2 (1 min) Introduction

The teacher introduces the theme to be discussed and the lesson objectives/outcomes.

3 (2 min) Plenary discussion

Speaking about the burning problems of today which may greatly influence our future from the students' point of view (overpopulation and famine, street crime, wars, energy crisis, pollution, etc.).

4 (4 min) Plenary

Discussion on the words of Theodor Roosevelt, an American President, and the relevance of his words to Ukraine:

"Here is your country. Cherish these natural wonders, cherish the natural resources, cherish the history and romance as a sacred heritage, for your children and your children's children. Do not let selfish men or greedy interests skin your country of its beauty, its riches or its romance."

5 (12 min) **Small-group discussion:** *Environmental causes of the today's world*

At the beginning – revision of the vocabulary and introduction of new words with the following presentation of the results of the discussion by each small group.

Materials to use: adaptation of Tullis, G. & Power, S *New Insights into Business*, Pearson Education Limited, ex. 1p. 65.

6 (14 min) **Video presentation:** The consequences of plastic pollution

Materials to use: TED presentation by Dianna Cohen https://www.ted.com/talks/dianna_cohen_tough_truths_ about plastic pollution

(At the beginning – revision of the vocabulary and introduction of new words, e.g.

ephemeral, garbage / rubbish / trash / scrap, garbage patch, gyre, cargo ship, decommissioned fishing trawler, chipping machine, cold molding machine, spigot, single-use, disposable, leach down cycle, incinerate, four Rs:

Reduce, Reuse, Recycle, + Refuse).

Possible questions to discuss in small groups and presentation of the results at the plenary:

- Why is plastic a problem?
- What does Dianna Cohen try to save?
- What does Dianna Cohen offer to do to get rid of plastic garbage?

8 (5 min) Teacher's presentation

Slides with plastic garbage and garbage in general (5-7 % of the territory of Ukraine is occupied by garbage landfills!)

9 (5 min) **Video presentation with a discussion**, plenary or in small groups with a plenary: *How the garbage problem is solved in other countries*. Sweden is an example.

Materials to use: Video https://www.youtube.com/watch?v=vmq_mKhQo38 (vocabulary: Waste-to-Energy (WTE), household waste, generate, heating, incinerator, emit, coal-fired power plant, landfill).

10 (16 min) **Reading and discussing** an article on the problem: *Sweden runs out of garbage, forced to import from neighbors (M.Hickman, December 9, 2016, 1:21 p.m., http://www.mnn.com/lifestyle/recycling/blogs/sweden-runs-out-of-garbage-forced-to-import-from-norway)*

11 (5 min) Video: Denmark experience (vocabulary: wind power surge) https://www.youtube.com/results?search_query=Denmark %27s+Wind+Farms+

12 (4 min) **Teacher-students discussion** *How citizens of Europe contribute to environmental protection and saving energy*:

Materials to use: https://www.youtube.com/watch?v=XT9mNmWlFCc).

Possible questions to discuss:

- What do you think, is it good, necessary, effective?
- Do you ride a bicycle? ...
- It often happens that in our country cars are a symbol of status, just to show off. Don't you think so? ...

13 (8 min) **Doing the task and discussing** the experience: *Companies-environmentalists*

Materials to use: adapted from *New Insights into Business*, ex. 2 p. 68-69 with the following questions to focus on.

14 (8 min) **Teacher, students' work in pairs:** Assess your degree of environmentalism

Possible Questionnaire (Yes / No): *How green are you?* ("food for thought" for students; adapted from different internet sources):

- Do you use public transport (contrary to driving a car)?
- Do you take plastic bottles to the bottle bank?
- Do you recycle paper?
- Do you pick up litter and put it in the bin?
- Do you use paper bags for shopping?
- Do you eat home-made food (contrary to buying fast food in disposable plastic containers)?
- Do you use organic fruit and vegetables?
- Are you ready to pay more for something because it is environmentally friendly or not tested on animals?
- Do you practice recycling, refilling, reusing, and refusing?

- Do you switch off TV and computer when you don't use them?
- Do you switch off the light before falling asleep?
- Do you have a cold shower in summer?
- Have you planted any trees or flowers recently?
- Do you practice ecological tourism (minimize any negative impacts of your visit on the place you visit)?

The finalist who has 14-15 "Yes" is a real environmentalist may be greeted with hand clapping.

15 (1 min) **Demonstration of** a funny, but important **video:** *Keep streets and Parks Clean* https://www.youtube.com/watch?v=PqR4L6ouVYg

16 (2 min) **Results**: assessment of students' critical thinking skills.

17 (1 min) Feedback from students.

Appendix 2. Critical Skills Assessment Tool: "I can do" statements

Satisfactory level (correlated with the University scale: 12-10 points and CEFR [4])

- I can justify my opinion and present supporting arguments on the basis of evidence, being free from bias and prejudice
- I can read publications or listen to presentations and understand particular attitudes and viewpoints, being able to distinguish fact from opinion
- I can agree or disagree with opinions of others, explain why, being polite and observing social conventions
- I can express my thoughts competently, without hindering the natural speech flow. I can use complete

sentences when I speak and write, employ correct grammar, accurate punctuation and appropriate, rich vocabulary

Developing Level (University scale, 9-7)

- I can express my opinion and present arguments to support it, trying to avoid bias and prejudice
- I can agree or disagree with authors and opinions of others and explain why, being polite and respectful
- I can speak and write without imposing any strain on the opponent
- I can read publications or listen to information and can understand facts, descriptions of events, feelings, opinions, and wishes
- I can express my thoughts, when speaking and writing, in complete sentences, employing mostly correct grammar, punctuation and relevant vocabulary

Basic Level (University scale, 6-4)

- I can follow the interlocutor
- I can answer questions adequately
- I can express my opinion but cannot or have difficulty with justifying it
- I can agree or disagree with authors and opinions of others but cannot or have difficulty explaining why.

Appendix 3. Feedback form for students (adapted from internet sources)

- I like
- I don't like
- I have a question
- I'm challenged by

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