

spoken and written language. However, implementation of machine translation programs in the process of teaching translators will make students more qualified and adapted to the modern conditions of the constantly changing world [3].

In conclusion, it seems clear that machine translation does not tend to displace the human translation process. Conversely, it is aimed at its facilitation and acceleration. Now translators have an opportunity to make their work more efficient: to spend less time and earn more money without losing quality. Therefore, considering all of the above, it can be concluded that changes in the translation industry, and particularly changes in training approach of the future translators, are necessary. Implementation of MT programs is a great opportunity to propel the work of translators to a new level.

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### **Развитие навыков критического мышления в обучении чтению научных текстов**

Данная статья посвящена рассмотрению понятия критического мышления и его развития при обучении чтению научных текстов. В статье рассматриваются основополагающие навыки и принципы, которые позволяют мыслить критически, а также приводятся

основные типы заданий, направленные на обучение критическому чтению и формирование способности мыслить критически.

### **Developing critical thinking skills in teaching academic reading**

Critical thinking is one of the approaches to teach and study English for academic purposes (EAP) as well as one of the defining characteristics of EAP. Perhaps more than any other aspect, critical thinking differentiates EAP from general EFL. EAP materials need to encourage and develop students' critical thinking skills; EAP teachers should foster the 'state of mind' in which critical thinking moments emerge naturally in the classroom. In doing so, students will be much better prepared for their academic study [2].

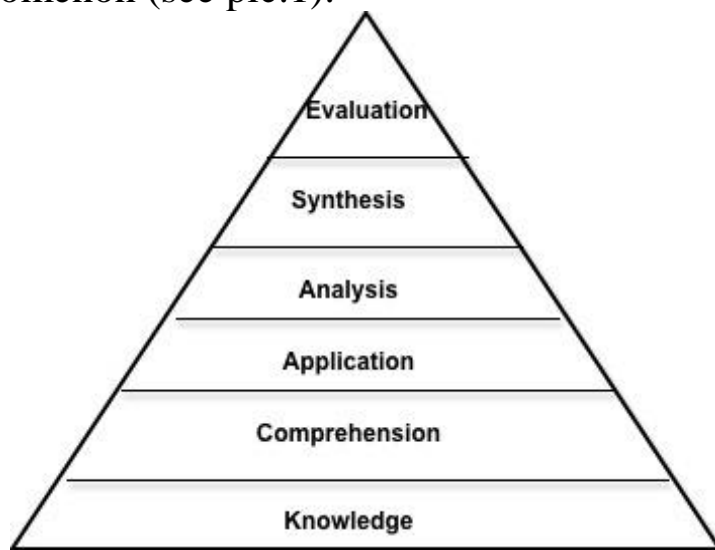
Dating back to the mid-late 20<sup>th</sup> century critical thinking is a notion which has a range of definitions. Some scientists define it as a set of independent cognitive abilities which can be taught in relation to any propositional content [5]. Three main notions can be singled out from this definition: first, critical thinking takes place in our mind as it is cognitive. Second, it is teachable. And the last one it is related to any material which we teach.

Tara DeLecce defines critical thinking as 'a process when a student makes reasoned judgments that are logical and well thought out; it is a way of thinking in which they do not simply accept all arguments and conclusions they are exposed to but rather have an attitude involving questioning such arguments and conclusions; it requires wanting to see what evidence is involved to support a particular argument or conclusion' [4].

According to this definition Tara DeLecce argues that critical thinking can be divided into three core skills: curiosity (to be open to new ideas, to have a desire to learn more information and seek evidence), skepticism (not to blindly believe everything everyone tells you but to have a healthy questioning attitude about new information) and humility (the ability to admit that your opinions and ideas are wrong when faced with new convincing evidence that states otherwise) [4]. It means that in doing a task, a critical thinking student undergoes a cognitive process of logic and inference, for example when finding relations in meaning between elements in a text. In doing so, it is useful to show skepticism towards what is being presented, together with a degree of uncertainty and self-doubt. It is not always necessary for the student or a teacher to be sure

they are right; it is better to attempt to construct meanings and in the process make mistakes than not make this effort at all. Therefore, it is essential that EAP students and teachers as critical thinkers reflect on and challenge the nature and sources of knowledge and how it is presented [2].

Bloom's taxonomy (Bloom, Englebert, Furst, Hill and Krathwohl 1956) offers a helpful tool for mapping and classifying aspects of knowledge. It deals with what is called the 'cognitive domain'. It consists of six key cognitive processes conceived in hierarchical order of complexity which help to come to the deeper understanding of a phenomenon (see pic.1).



Picture 1. Bloom's taxonomy of the cognitive domain

In simple terms, one starts out with what he knows, and learns new information ('knowledge') after which he learns to understand it effectively ('comprehension'). He can then do something with it, such as make use of it in a given situation ('application'); later he can deconstruct it and work out what its parts are and how they interrelate ('analysis'). The next stage is to deal with other sources of knowledge, repeat the process, and start selecting from the different sources and pitting them together into something new and creative ('synthesis'). Finally, one critically responds to the whole by asking and answering questions relating to its reliability, validity, influence, effectiveness, and other criteria ('evaluation'). With regard to this article, the three higher cognitive processes – analysis, synthesis and evaluation – are of particular relevance to critical thinking [2].

Therefore, in its ideal form, critical thinking is based on such intellectual principles that go beyond subject matter divisions, i.e. precision, correctness, uniformity, relevance, sound evidence, good

reasons, depth, breadth, and justice [5]. It seems plausible that critical thinking requires students to go beyond simple thinking and to perform at a more complex level. It helps students analyze the truthfulness of utterances and come to a deeper understanding of a phenomenon. However, although critical thinking may benefit from creativity and imagination which help to go beyond simple thinking, it should not be confused with free 'blue skies thinking'. In other words, it needs to be grounded in evidence and supported by logic and rigour.

In academic context, two types of critical thinking with more restricted meanings can be usefully identified: critical reading and critical writing [2]. They have a great chance to overlap because critical reading of others' work will usually be in preparation for producing someone own written text. Wallace and Wray define critical reading as follows: 'The skill of critical reading lies in assessing the extent to which authors have provided adequate justification for the claims they make. This assessment depends partly on what the authors have communicated and partly on other relevant knowledge, experience and inference' [3, p.7].

In the context of academic reading, the methods of critical reading can be very helpful. In order to make students read critically, their teacher needs to encourage them:

- to find a purpose of reading (for questions, problems and issues; for information and data; for concepts, theories, and ideas; for interpretations and conclusions; for assumptions; for implications and consequences; and for points of view) and this purpose in reading must take into account the author's purpose in writing;
- to concentrate on the texts in order to make out the importance of minute details for identifying patterns (order patterns and sequences, similarities and contrasts, guessing and predicting, and finding the relationships);
  - to classify parts of the text while reading;
  - to understand the core, secondary and peripheral ideas of the text because the primary ideas explain all the other ones;
  - to construct system of thoughts as students read;
  - to think within the scientific system as a whole. When students understand core scientific ideas, they can begin to think scientifically;
- to relate the core ideas students learn within one discipline to core ideas in other systems of knowledge, for knowledge exists not only in a system but also in relation to all other systems of knowledge. For

example, if in studying botany, we learn that all plants have cells, we should connect this idea to the fact that all animals have cells (which we learned in studying biology). We can then begin to consider the similarities and differences between animal and plant cells [2,5, 6].

Generally, a teacher can give some tasks associated with critical reading to their students such as observation of a text as a system, examination of patterns of the text, interpretation of author's thoughts, analysis of author's ideas, evaluation of author's grounds and evidence, synthesis of ideas observed in this text with other groups of knowledge existed in their mind, reasoning of their own ideas, making connections between patterns of the text, justification of the information stated in the text and their own arguments[2].

In conclusion, it is necessary to say that developing critical thinking skills in teaching academic reading may take a large amount of practice and diligence. As such, EAP teachers should put much effort to handle their classes in this way. However, the outcome of these classes will be students who think critically and can be successful in dealing with the complexities of the modern world. It is worth noting that strategies presented here are only some samples of devises for developing students' critical thinking and teachers can devise many more activities on their own based on the tasks which can be integrated in the process of studying.

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### **Древняя якутская письменность**

В статье раскрывается гипотеза о существовании древней письменности у якутов. Представлены доказательства и гипотезы о существовании древне-якутской рунической письменности.

#### **Die alte Schrift der Jakuten**

Als Runen bezeichnet man die alten Schriftzeichender Germanen. Aber es gibt auch die alttürkische Schrift. Wegen ihrer Ähnlichkeit mit den nordisch-germanischen Runen werden die Schriftzeichen Turk-Runen genannt.

Viele Forscher wie A.P. Okladnikow, I.I. Baraschkow, P.W. Popow gehen davon aus, dass die Jakuten auch eine Schrift hatten. Die Annahme, dass die Jakuten Schriftzeichen hatten, beruht auf den Untersuchungen der Felsenzeichnungen aus dem mittleren Lena-Gebiet. Die Entzifferung dieser Schriftzeichen auf den Lenafelsen durch A.I. Krivoschapkin untermauert die Gültigkeit dieser Annahme.

Die Mehrheit der Wissenschaftler nimmt an, dass die Vorfahren der Jakuten Hunnen waren, diese wiederum benutzten eine Runenschrift, die große Ähnlichkeit mit den Inschriften auf den Lenafelsen aufweist.

Es gibt verschiedene Legenden, alte Geschichten und Auszüge aus dem Oloncho, dem jakutischen Volksepos, die davon erzählen, dass die Jakuten ihre eigene Schrift hatten, die einem der jakutischen Vorfahren namens Ellej Bootur während der Flucht in den Fluss Lena fiel. Erst im 17. Jahrhundert, als Jakutien an das russische Zarenreich angeschlossen wurde, bekamen die Jakuten eine Buchstabenschrift. Diese Zeit bis Mitte des 19. Jahrhunderts nennt P.V. Popov "die Phase der Entstehung der Buchstabenschrift".