

МЕТОДИЧЕСКАЯ РАЗРАБОТКА НА АНГЛИЙСКОМ ЯЗЫКЕ:
UNDERSTANDING INNOVATION

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В учебной программе Практика перевода западного иностранного языка для специальности: 1-23 01 03 «Лингвострановедение», 2015 г. есть тема «Инновации и новые идеи», которая изучается в IX семестре.

Представленная на английском языке методическая разработка (сокращенный вариант) может быть использована как опора для ее изучения. Ее полная версия находится в «Электронном Портфолио профессионального развития кафедры английского языка гуманитарных специальностей БГУ». Дополнительный материал для студентов будет размещен на персональной странице автора на сайте кафедры.

Цель разработки: познакомить студентов с основами того, что в русском языке получило название «инноватика», а в английском *'science of innovation'* для формирования первичного представления студентов по теме с использованием достоверных научных источников.

Focus questions.

- Why to discuss innovation.
- What you know about innovation.
- What you don't know about innovation as a concept.
- How to test our understanding of the similar concepts.

Stage 1. Focus on the topic. 'To be or not to be innovative' is a fundamental question for the entire world. Innovation is a key to success. Rapid changes and advances characterize today's environment, and in order to remain competitive in the global marketplace, organizations must develop and implement new ideas. The process of innovation is of immense social interest and impact.

Stage 2. Pre-reading task.

- What is innovation? Brainstorm the question (5—7 minutes) individually on a piece of paper, then discuss your ideas in pairs.
- Collect ideas and create MIND MAP of the concept 'innovation' on the board. All students' ideas are welcome.

It may look like that:



Mind map of the concept 'innovation' as presented by the students (example)

Stage 3. Reading and discussion. Read text A. Try to find similarities and differences comparing «our» Mind Map and the ideas from the text.

TEXT. A

UNDERSTANDING INNOVATION

There are various approaches which sets the stage for understanding innovation: neurophysiological, psychological, philosophical, sociological, economic and other in contemporary innovation research. Definitions of 'innovation' abound. This is because, as it has been mentioned, the concept of innovation appears in many different fields.

The term 'innovation' has many meanings. It can refer to the inventive process by which new things, ideas, and practices are created; it can mean the new thing, idea or practice itself with a stronger emphasis on 'newness'. To many the word appears to indicate:

- inventing something new
- generating new ideas only
- improving something that already exists
- spreading new ideas
- performing an existing task in a new way
- following the leader in your sphere
- adopting something that has been successfully tried elsewhere
- introducing changes
- seeing something from a different perspective.

Thus people often use it in its minimalist meaning. There is a wide range of complex definitions of innovation. Here are some examples:

— innovation is the generation, acceptance, and implementation of new ideas, processes, products, or services — R. Kanter;

— innovation is the search for and the discovery, development, improvement, adoption and commercialization of new processes, new products and new organizational structures and procedures — T. Jorde & D. Teece;

— innovation is creative destruction;

— innovation is the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society — M. West & J. Farr.

But up to now, there is no generally accepted single definition of innovation. And a clear-cut definition is perhaps not possible because of the complexity of innovation and because of the variations in the way it occurs. But what is important to understand that innovation is not a single action but a total process of interrelated sub-processes.

Stage 4. Further reading and discussion. As we can see ‘innovation’ seems to have much in common with similar words, ‘invention’, ‘change’, ‘creativity’. Work with a partner and for each set (innovation- change, innovation-creativity, innovation-invention), discuss your understanding of each pair emphasizing the essential difference. Read text B and then discuss your understanding again.

TEXT B.

‘Invention’ is often defined as a new thing, method, instrument or device created by thought. The emphasis in this definition seems to be on a product, object or process, and this is further confirmed by the addition of the notion of patenting. Arguably, then, ‘to innovate’ is much broader than ‘to invent’. There are many levels and forms of innovation. While ‘innovation’ includes the notion of creating something new, it also suggests that this creation might be an alteration of something that already exists, looking at the familiar in new ways, as well as the initiation of something entirely original. Further, while ‘innovation’ includes the creation of an object, it is much broader than this. It might also include a set of ideas or beliefs, a way of thinking about a problem or set of issues, a process of organising or solving problems, a set of practices or ways of doing something. While it may be an end, with identifiable outcomes and products, it may also be the process by which the ends are achieved. In some sense, the meaning of ‘innovation’ might be more usefully associated with notions of thinking, believing and/or doing things differently from previously, in such a way that this results more closely in achieving goals and outcomes.

In this sense, it is closely related to ‘change’, a term it is often used in conjunction, or even synonymously, with. Certainly, ‘innovation’ is inextricably tied to knowing and thinking, and particularly new or different ways of seeing, thinking about and using knowledge. It is also centrally linked to learning, and particularly learning from one another.

Some say that invention is a breakthrough and innovation is an actualization (impact on societies and market). In education, however, we are concerned less with actual invention of new devices and methods than with their use and their dissemination throughout educational institutions. Indeed, it is a fact that most of the local changes that occur are adaptations of something already in practice in some neighboring university or school. People are, therefore, particularly concerned with the aspect of adoption when a student, a teacher or an entire educational institution puts into practice a concept, an attitude, or a method which is qualitatively different from those which had previously been in operation.

M. Miles considers that innovation is clearly more planned, deliberate, routinised and willed that change, which tends to be spontaneous.

Innovations vary in extent, the degree to which one deviates from the past proving or opposing famous words ‘there is nothing new under the sun’. There exists a distinction between psychological and historical creativity — having ideas that are novel for oneself vs. novel for humankind.

Thomas Edison’s famous analysis of genius — that it is 1 % inspiration and 99 % perspiration — pertains to innovation and other endeavors that depend on the generation of creative ideas. Per the inspiration account, innovative ideas result from dazzling mental leaps and ‘Aha’ experiences. The perspiration account sees innovative breakthroughs as resulting from more effortful activities. But each account has inadequacies. Inspiration is unreliable, incapable of being enacted at will, so would-be innovators can derive few benefits from this perspective. The perspiration account, however, fails to explain how people generate insightful, non-obvious possibilities that result in major innovative breakthroughs. Thus, the poetic qualities that make Edison’s epigram memorable also make it misleading.

The terms creativity and innovation are often used as essentially equivalent, and other times are considered to represent quite distinct phenomena. Innovation may involve creativity, as in discovery and development of a new process, but not all innovations are creative. Innovation presumes creativity, but creativity does not necessarily entail innovation.

Creativity is, fundamentally, a cognitive process, the product of which is a particular concept, idea, scientific discovery, technological invention, new design, or distinctive literary, musical or artistic work. Innovation involves both a cognitive process of usually individual creativity, and a social-historical process by which the created product is accepted by, influences, or is assimilated into, a particular setting. Innovation is a social process with the elements of the process being events that occur between people whereas creativity is an individual cognitive process in which events occur within the person.

Creativity appears to be understood more as absolute novelty (bring into existence) rather than the relative novelty of innovation (bring in novelties). What is innovative or creative for you may not be for your community, much less for the human race or the universe as a whole. The advanced inhabitants of Lagado or of the planet Zork may have achieved it already. Margaret Boden (1990) distinguishes an individual’s psychologically creative efforts, or personal firsts, from historically creative accomplishments, or historical firsts.

Another way of distinguishing the concepts is to see creativity as the ideation component of innovation and innovation as encompassing both the proposal and applications of the new ideas. According to most definitions innovation may involve creativity, as in the discovery and development of a new process, but not all innovations will be creative. Sometimes innovation and creativity appear to be used interchangeably. All inventions and innovations start with some kind of creative enterprise.

Stage 5. After-reading: applications and activities.

— Clip an article on the Internet that relates to one of the focus questions. Be ready to render it in class.

— Select one definition of ‘innovation’ as a concept that you like best. Be ready to explain your choice.