
TEACHING METHODS USED IN TEACHING SENIORS

METHOD: INTERDISCIPLINARY APPROACH

SUBJECT: ECONOMICS

TEACHER: Ing. B. JORDÁNOVÁ, Ing. K. TOMŠÍKOVÁ

A. Theoretical background

The current world is really closely connected and everything is interrelated. To achieve challenging and distant targets it is essential to acquire knowledge that crosses the boundaries of disciplines and the capacity of the mind of an average person.

We can expect two possible directions of development in disciplines of human knowledge and therefore in learning. On the one hand, differentiation and specialization will continue, science themes will remain narrow and focused on very specific knowledge. At the end of this process, there stand specialists, experts or workers replaceable with difficulty. On the other hand, there is an increasingly expected growth in demand for the ability to communicate and collaborate interdisciplinarily. This trend can be already observed also in education of seniors. CULS teachers seek for answer the question of what interdisciplinary cooperation means in adult education and how it can be developed in teaching practice. They are also interested in what competences seniors' students should get to be able to navigate themselves and to succeed in today's complex and highly interconnected world.

B. Using this method in Economics lessons with seniors

I am using different methods in teaching seniors. I think a **didactic game** is really interactive and interesting method. I also use the oral methods – **interpretation and discussion**. I also use **visual-interpretation method** for showing different types of contracts and forms of invoices and other accountancy documents.

On the other hand, I am not so familiar with **heuristic problem methods**, I am at the beginning of a career of the teacher, so I am not so experienced teacher and I think this is the most difficult method. I would like to describe more approach than different kind of methods. I always use the interdisciplinary approach and I can cope with crosscutting topics in my teaching. I think that offering a complex knowledge to students is really important. In the next paragraphs, I will show ways for integrating of several disciplines into teaching Economics within the project KA2 Digitally Innovative – Unique Ones.

A) Integration of Mathematic

The Economics is really connected with algebra. I used mathematic exercises in teaching "Costs and profit of company", "Tax records", "Depreciation of property capital" and "Budget". Students they learned how to calculate their own personal home budget and they were able to count tax from their income.

B) Integration of English language

Many terms in Macro-economy, Micro-economy, Management and Marketing are of words from English. So the link with English is really obvious. In each lesson, I thoroughly try to explain every foreign term to students. There are some examples: GDP, fundraising, budget, franchising, factoring, public relations, product placement, cash-flow...). There are also other vocabulary of different foreign languages used in economics (e. g. portfolio, franchise, index, demand, parity, consortium...)

To memorise more difficult words, I play with students a game, which is described in the exercise 2 on the next page of this report.

C) Integration of History

I used many topics from history in teaching the different structures of world economic systems (custom system, command system - centrally planned economy, market economy and mixed system of economy). I also paid an attention to the history of the trade – I explained differences of barter and monetary trade and described a development of different types tenders.

D) Integration of Civic

The interdisciplinary link with civics was for example in lesson of Macro-economy when we did a comparison of the GDP and unemployment rate of selected countries in Asia, South America, Africa, Europe, USA and Canada. Such topics are also in accordance with integration of crosscutting topic "People in Democratic society".

E) Integration of ICT

One lesson was devoted to searching information on Internet in order to find out different product at financial market. I also showed to seniors plenty of interesting videos on Youtube (e.g. documentary of command economy system in Cambodia in 1970, different interesting commercials when I was teaching marketing topics or examples of markets in South Asia and Central Africa).

In one lesson, I showed the electronic programmes for accountancy such us "POHODA", "FlexiBee" and on-line programme "Allegro". We have compared strengths and weaknesses of all those presented programmes.

F) Integration of Environmental education

I explained what the term “externality” means and then we were discussing what are negative impact on the environment of the different types of power stations.

Environmental topics are in relation with crosscutting topic “People and Environment”. More tips for links between economics and environmental education are in the chapter C.

G) Integration of Art education

Two lessons were aimed at marketing. One topic was aimed at explanation of different roles of the package of a product. The students were given task to create a layout of new chocolate in the market. They used paper, colour pens and some cut pictures from magazines.

Another example can be giving task to design a logo of new brand of small company producing milk products such as cheese, quark and butter.

C. Examples of exercises

A) Integration of mathematic

EXERCISE 1: Calculation of total costs

$CN = FN + VN$	$CN = \text{total costs}$	$FN = \text{fixed costs}$	$VN = \text{variable costs}$
$CN = FN + b \cdot q$	$b = \text{variable costs per one product}$		$q = \text{quantity}$

Company has got these costs in April 2017:

- *Fixed costs: 200 000 CZK*
- *Variable costs per one product: 12,- CZK*

Please calculate total costs for month if the production is:

- 10 000 pieces*
- 15 000 pieces*
- 20 000 pieces*

Result: $CN = 200\,000 + 12 \cdot 10\,000$

$$\underline{CN = 320\,000\text{ CZK}}$$

b) $CN = 200\,000 + 12 \cdot 15\,000$

$$\underline{CN = 380\,000\text{ CZK}}$$

c) $CN = 200\,000 + 12 \cdot 20\,000$

$$\underline{CN = 440\,000\text{ CZK}}$$

B) Integration of English language

EXERCISE 2: Game "Suitcase"

This is a really popular TV show on the Czech TV. Teacher will prepare cards with economic terminology. A sheet of paper of the format A4 contains only one word in big capital letters. He or she will divide a classroom into few small groups. Each group will select one interpreter. The competition can start! The interpreter will see the first word without showing this term to the other members of the group. The interpreter will describe in few sentences the word without saying this term or word-core. When someone in the group will correctly identify the word, the group can get a point. Each group will have 3 minutes for explaining and guessing the words. The winner is the group, which will identify the biggest number of correct words in time of three minutes.

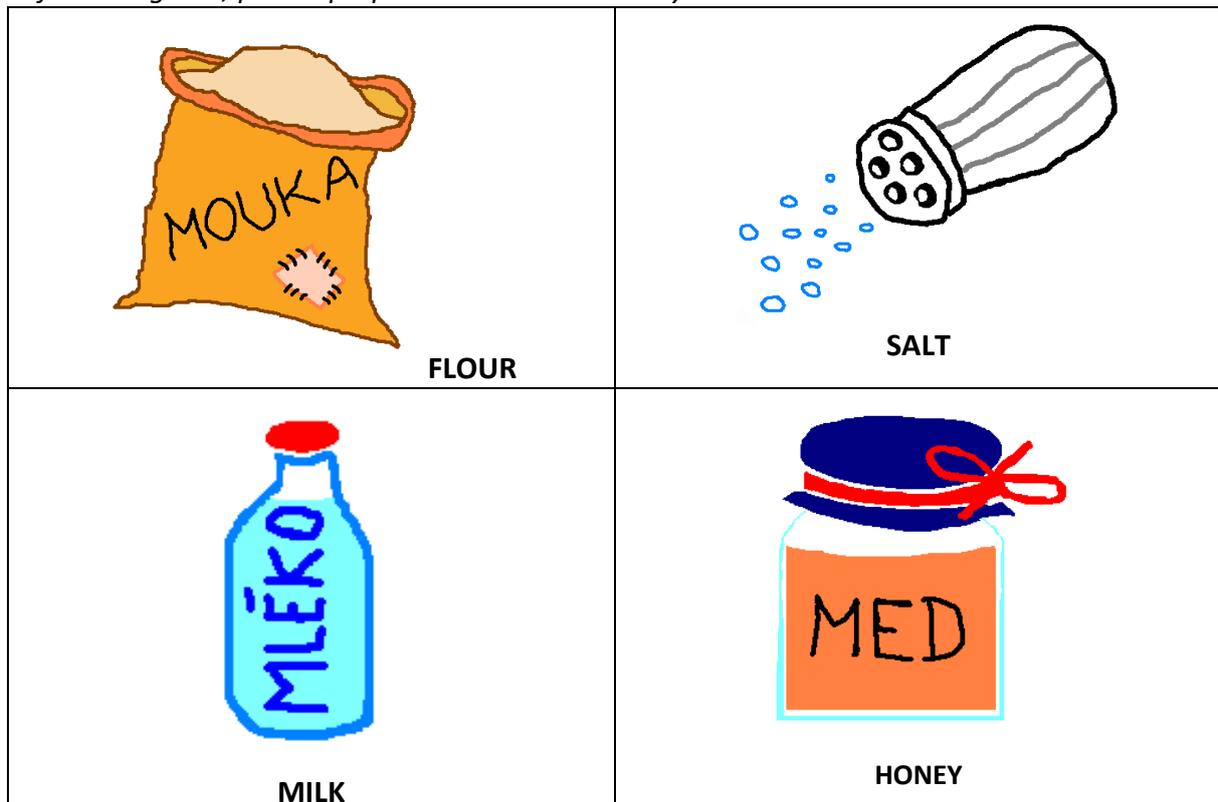
There are some examples of some words:

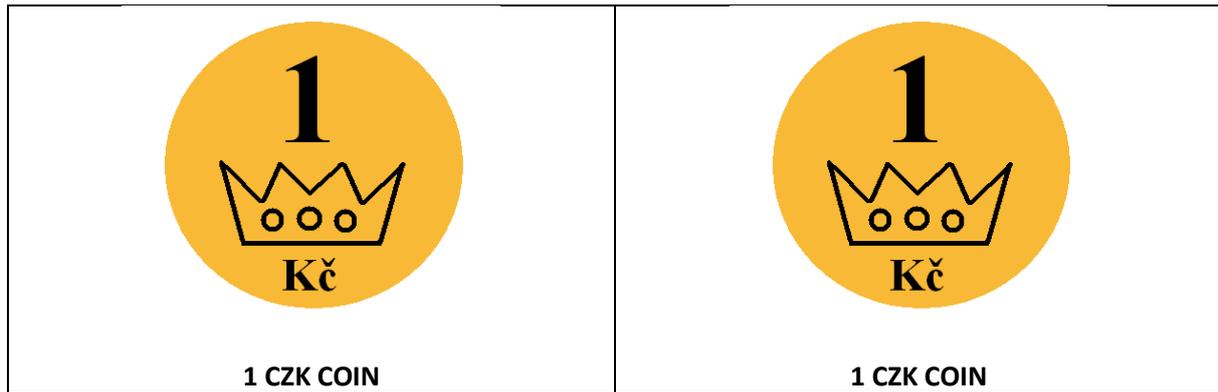
LEASING / PROMOTION / DIRECT MAIL / DIRECT MARKETING/ FUNDRAISING / GDP / KNOW-HOW / GOOD-WILL / PRODUCT PLACEMENT / PUBLIC RELATIONS / FORTFAITING / FACTORING / TIME MANAGEMENT / RISK MANAGEMENT / PORTFOLIO / SUPPLY / IMPORT/ EXPORT / PARITY / HUMAN RESOURCES / JUST-IN-TIME / JOINT VENTURES...

C) Integration of History

EXERCISE 3: The role of barter exchange and currency exchange

Before the game, please prepare cards with these symbols.





1. Explain the meaning of barter Exchange and please give example from history. Discuss pluses and minutes of barter trade.
2. Hand out the cards with raw materials to students. Each student receives four cards.
3. Ask students to go around the class and exchange in order to get four different cards of row materials. Everyone can exchange only one card for another one card.
4. Please record the time of completing the tasks.
5. Than play this game with a little bit different rules: give to students 6 cards: two with coins and four with raw materials.
6. With the card of the value of CZK 1, students can buy any raw materials; they can not charge more than CZK 1 for each raw material. Raw materials can not be exchanged without money (as they changed the game in the first round).
7. Start the game and calculate time for this hint.
8. After the end of the game say what was the duration of the first round and the second round with the money.
9. Was the process of exchange in the second round easier and faster?
10. In conclusion, repeat, how is the exchange of goods and services without using money, what are its disadvantages (the problem of finding a suitable counterparty to the transaction, goods does not store value), what is money (generally accepted medium of exchange, which itself has a significant value) and to facilitate the exchange of money

EXERCISE 4: Types of economical systems

Teacher will prepare large cards with the information from the table. He or she need to take also sticky tape for completing this task. In the classroom, he or she will draw a table with empty cells and write down only headings from the uppers row (economical system / who decides/ method of dividing / historical examples) and left column (Sound bar system, Command system, Market system and Mixed system). Than teacher will ask students to fill in the table by sticking cards into empty cells.

Economical system	Who decided what and how produce?	Method of dividing products	Historical example
Sound bar (custom) system	Chief, tribal leader	According to the needs of members of the tribe, the biggest family gets more	Prehistory, Stone Age ... ??? Nowadays - the tribes in Central Africa and Polynesia
Command system (centrally planned economy)	The highest representatives of leading party	According to the plan set by the government	Cambodia in 70ties pf 20 th century, very close were SSSR and communists countries (ČSSR, PLDR, DDR...)
Market system	Rules of market without state interference	Successful earns, unsuccessful undergo	In developed countries in 19 th century
Mixed system	Rules of market with state regulations		Contemporary democratic states, in the developed economical systems

D) Integration of Civic

EXERCISE 5: African contracts

African countries such as Egypt, South Africa, Nigeria, Ethiopia and Chad, belong among the economically less developed countries of the world. This does not mean that they are at the same level! Selected statistical data in table 1 will help you find out what are the selected African countries like, and what are they differences.

Table 1: Statistical information

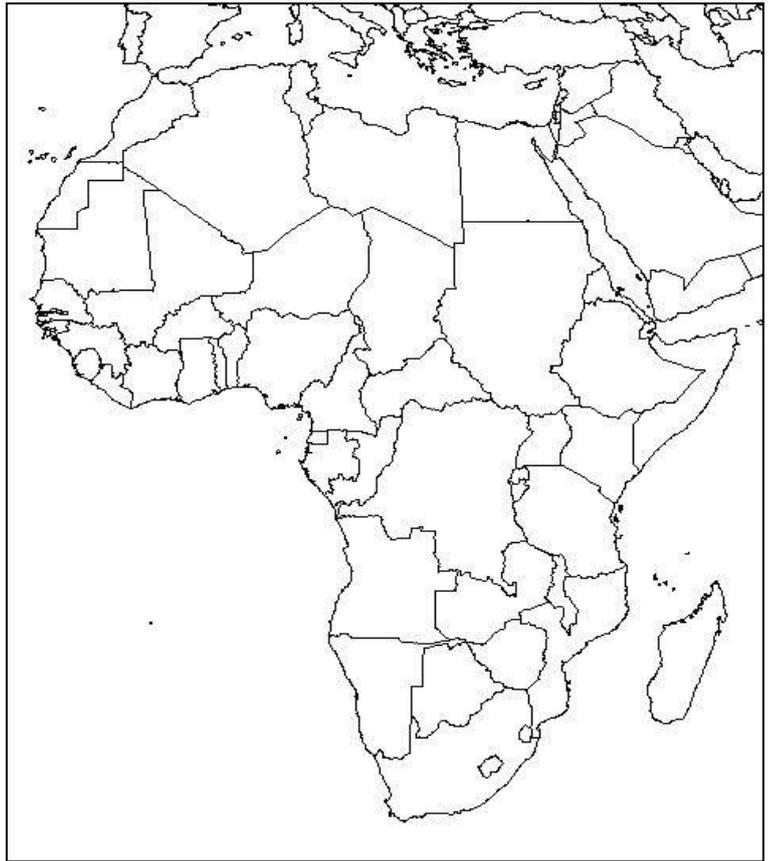
Statistical information / country	Egypt	JAR	Nigeria	Ethiopia	Chad	Czech Republic
Human Development Index	111	121	159	170	171	30
Number of inhabitants (millions)	72,6	47,2	128,7	75,6	9,4	10,2
HDP per person (USD)	1085	4675	560	114	447	10475
Estimated length of life (years)	69,6	49	43,3	47,6	43,6	75,5
Population with access to water (%)	98	88	48	22	42	100
The number of doctors per 100 000 inhabitants in the country	54	77	28	3	4	351
Infant mortality (‰)	36	67	197	166	200	4

1. Try to identify, where the African country from the table 1 are situated. Please put their names in the correct space in the map of Africa on the right side of this worksheet.

2. On the basis of statistical data in Table. 1 describe the development situation of South Africa (JAR). Do not fill in only numbers, but think about what the numbers mean.

A/ Which country of the mentioned African country is the most developed and which one is the most undeveloped?

B/ Which data from Table. 1 helped to the decision-making?



4. Please write at least four differences between Ethiopia and the Czech Republic. Please use the information from the table 1 for completing this task.

D) Integration of ICT

Examples of interesting videos:

a) topic: different types of markets, there are videos of different types of markets

Istanbul: <http://www.youtube.com/watch?v=EvhhaKjXDq8>

Thailand: http://www.youtube.com/watch?v=sTmmEj_27xE

Vietnam: <https://www.youtube.com/watch?v=NsciGdxJycM>

b) topic: different economic systems: video about the centrally planned system of the dictator Pol Pot (Cambodia, 1970s)

<https://www.youtube.com/watch?v=axcRdic60nA&index=3&list=PLB6DJaecu8CYzbPAgQF3MJgRB54k4DezD>

c) topic: management of stock: video of factory production of the SKODA car

<http://www.youtube.com/watch?v=LNwxk33TD1s>

d) **topic: capital of a company:** link to the list of the world "richest" companies

[http://www.top-firmy.eu/products/svetove-znacky-nejdrazsi-znacka-sveta-google-/](http://www.top-firmy.eu/products/svetove-znacky-nejdrazsi-znacka-sveta-google/)

e) **topic: legal forms of business:** register of all the Czech firms

http://www.info.mfcr.cz/ares/ares_es.html.cz

E) Integration of Environmental education

EXERCISE 6: Discussion

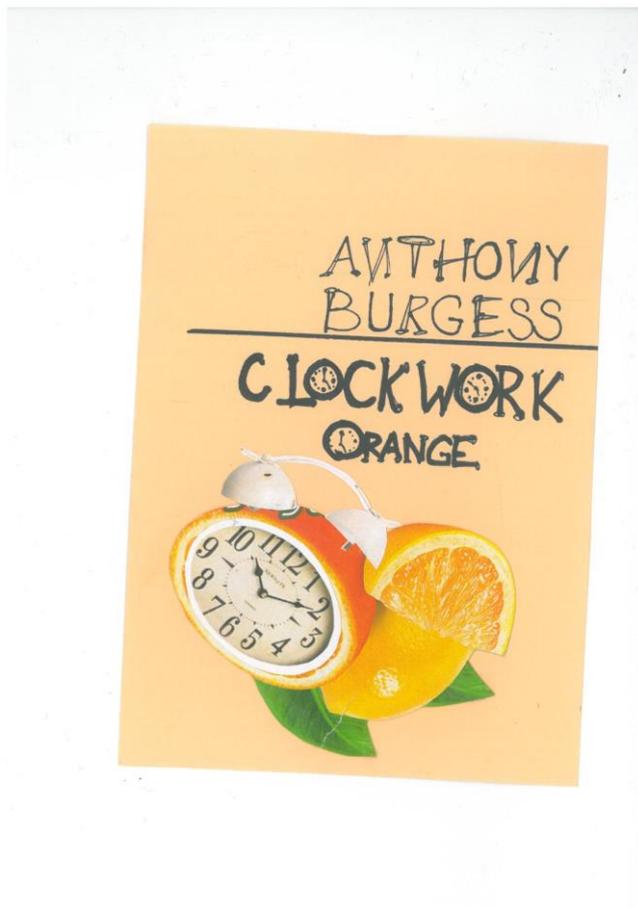
Please discuss, what kind of economic production has the strongest negative impact on the environment. Please mention fields of industry or other economic activities, which damage the most:

- a) nature sources of water
- b) soil
- c) forests
- d) animal species
- e) climate (air)

F) Integration of Art

Exercise 7: Marketing – Book cover

The teacher will prepare sheets of paper of format A5. He or she ask students to bring several magazines with pictures and colour pencils. Than they will be given task. Students are asked to prepare a layout of the favourite book. Students will get 15 minutes to complete the tasks. After that, they will vote for the most interesting layout. Each student give point to the work which he likes the most.



Picture 1: Marketing – independent work of students – book cover