Modern methods and techniques
for encouraging the creativity of
students and teachers

(Methodology/guidelines)

Skopje, 2015

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CONTEMPORARY LEARNING METHODS

Chapter overview

VERBAL LEARNING METHODS

" *The mediocre teacher tells.*
The good teacher explains.
The superior teacher demonstrates.
The great teacher inspires.

William Arthur Ward

The methods of verbal learning is the kind of work in the classroom in which the tasks are verbally done by the teacher of the students. This method may also be referred to as a monologue method. The method of verbal learning should be equally practiced by the students and the teachers alike. It is used when revising, oral presenting, giving in reports for books that had been already read, events, which had been already visited et cetera. Moreover, this method enriches the

student's vocabulary and makes the learning process easier for them.

Examples for usage of the verbal learning:

- Making suggestions
- Describing psychological state
- Describing events
- Recording shows
- Drawing conclusions

The verbal learning method includes:

- Telling
- Describing
- Explaining
- Reporting

Abstract

Creative teaching has become a trend of the modern time, and faced with that, educationists dig into the research literature and implement new methods in the educational process. They encourage their students to engage in the excitement of the process and help them discover the value of learning based on evidence and higher skills. They teach them to become creative solvers of various, modern problems.

Those ways of teaching has turned into the goals of educationists form all around the globe. However, methods that teachers can use in order to achieve that had not been widely known. That's why the purpose of this project is to review and present the methods and techniques educationists should tend to implement in their classes. Furthermore, the relationship between creativity, other skills, and assessment methods is explored and several instructional methods for creative problem solving in the classroom are described. Students need to be repeatedly taught how to be creative, to integrate their knowledge across subject areas, to question their own assumptions and to present their viewpoints and conclusions.

Keywords: creativity, educationists, teaching, methods, strategies, problem solving, students

Introduction

In the direction of the future of the education and the new modern school, we can not write on the subject without mentioning the importance, the value and the role of the contemporary methods, techniques and activities, as well as the role of the technology and the computer studies in the development of the educational process and in the enriching of the efficiency and speed of learning. These components will be a fundamental factor of the development of the education and of the way of realization of the whole process both today and in the future. In that aspect, this project offers possibilities and useful guidance for the teachers towards their successful

work with their students.

New concepts, contents and views are incorporated in the project that would set a new role for the teachers and would encourage the use of the new educational methodology, all with the purpose to develop the creative thinking of the students. Beginning with the methods that can be incorporated in the educational process, not only during the class, but also outside the classroom, they offer both the teacher and the student continuous active role while discovering new information and gaining new skills. They are encouraging the creativity in the teachers as well as the interest of the students in the subjects.

In the part that elaborates the contemporary methods, the attention is focused on the verbal and visual methods. As verbal methods, the project mentions the method of oral presentation, the method of telling, reading method and writing method, while visual methods are the demonstration method, the presentation method, illustrative work, experiment, method of drawing and written work.

The methods show the grave importance of the students' participation in the classes and their contribution in the lessons that makes learning far easier than it once was. As mainly student-centered, the methods focus on the students making the suggestions and expressing their opinions during the teaching process. The teacher should always consider their thoughts on the matter and incorporate their points in the classroom. The students should not only learn and then answer questions for grades, they should also understand everything they learn and present it in a way that the material appears to them. In addition to this, the teachers should estimate the time they need to process everything and then ask them to reproduce it. That's where the methods jump in. With their help, the students should learn easier and by using them they should achieve a bigger success in their studies.

Furthermore, the teachers should not only use the methods as a tool to encourage their students to learn more, but also to improve their creative thinking and to help them understand the lessons in a more efficient way. That being the purpose of this project, the oral and visual methods that are shown in it, are meant to make the classes more interesting and the material for learning more approachable to the students.

With the methods for reading the text so that the students could understand most of it, the methods for writing the thoughts on paper, the conclusion the students can give on the board with schemes, diagrams, tables, spider webs and so many more, the teaching will never be the same. Its growth and development will continue and the teachers' part in all of that would get more and more advanced.

The part of the project that describes the activities for encouraging the creative thinking of the students consists of contemporary techniques and activities that offer possibilities with which the teacher will make the classes and the educational material closer and more approachable to the students. This part of the project contains activities that will make the studies more interesting, more creative and more attractive to the students. Here the mental maps, learning through games, fun and humor, role playing, six hats, associations, quizzes, solving situations with problems are presented as useful techniques.

The third part of the project is meant for the usage of IT in the educational process. This process enables creating a new change in the role of the teacher whose role as a deliverer and interpreter changes into a mentor and a leader of the student through different methods and techniques for successful learning. This part includes the ways of using ICT for keeping, analyzing and elaborating information connected to the new knowledge and contents, usage of the Internet, applicative programs for educational contents and fields, programs using multimedia, installing electronic systems and software for learning.

A. METHODS OF ORAL PRESENTATION

Telling

Telling is in fact presenting objective events or subjective experiences. With it one can affect the students' mood and the atmosphere in the classroom. The purpose of this method is to encourage the development of the student's fantasy, creative thinking and the vocabulary in a way that seldom methods do.

Depending on the contents of what we speak, the telling can be:

•Epic (the telling events and heroism);

•Lyrical (the telling emotions);

•Dramatic (the telling situations);

•Combined form

The telling should be correct, precise and creative. It should always place the students in the first place. To succeed in the method of telling, the following conditions should be

applied:

•The telling should be concretely with implementing details;

•Dialogs should be created by including rhetorical questions;

•Personal tone of the telling should be given so that the originality of the person come in light;

•Emotional tones should also be included;

•Articulation is an important part as well;

•There should be a tempo maintained while telling

•Some parts should be accented by a good intonation or highlighting

Describing

The describing as a form of the oral method is very important for developing the ability to observe and ability to

present both verbal and in writing. Describing is the presentation of emotions and thoughts or a subject, picture, animal, model, panorama already experienced.

The purpose of describing is to cover several areas with which a bigger and more detailed picture of the aspect is provided. The describing will be more detailed and complete if numerous facts, areas and people are covered.

The describing can be:

• Scientific

• Artistic and Creative

In case the describing is not adequate, it becomes monotone and tiring for the students and that is why it should be combined with other methods in order to attract the listeners' attention.

Explaining

Explaining as a method of oral presentation is often used when students should be acquainted with unknown or not entirely familiar words, concepts, laws, processes and in the same time to be better explained and clarified. What is unknown to them should become clear with the help of what they already know.

While explaining, the teacher should apply certain thinking processes and operations, encouraging the students to come to a conclusion and understand the subject.

By the end of the class, the teacher sums up the presentation using the explaining method.

Furthermore, the teacher should implement impulses which should capture and get the students' attention. Those impulses can be verbal and impulses of movement.

Verbal impulses are achieved with words of encouragement such as: "Excellent", "Very good", "Nice", or with words of abnegation: "Wrong", "Incorrect", declaring doubt – "Is it…", "Can it be…", with imperative words – "Be careful", "Think about it", "Try again".

Impulses of movement are the ones who relate to gesticulations with hands or with body language of the one who uses the method of verbal presentation. That excels in emphasizing vital parts of the speech and achieves a theatrical expressing of thoughts which results in catching the students' attention. This kind of explaining becomes compelling and interesting to the students, and sometimes it can be funny and entertaining.

Reporting

Reporting is a rather specific method of oral presentation, because it's used by the end of the class in order to see what the students have realized.

It is noticed whether the subject is understood by giving short reports. The report consists of questions for what the student understood, did not understood or needed to revise and wanted to gain knowledge in:

• What did you understand?

• What did you not understand?

• What do you need to revise?

• What do you want to know?

Eventually, the teacher analyses and realizes his/hers efficiency in the process of the oral presentation with the help of the active participation of the students and their provided answers.

B. METHODS OF CONVERSATION

The methods of conversation appear as the basic, fundamental methods of teaching. They are one of the widest-spread and the most popular methods in the educational process. The methods of conversation represent methods of learning, which enable the studies to develop in a form with questions and answers.

Structural elements of these methods are the question and the answer. The methods of conversation should be used when revising, exercising and checking the students' knowledge, as well as in helping them master the new material.

Forms of the methods of conversation

Depending on the subject of the conversation, the forms can be: thematically specified and thematically unspecified conversations. In the thematically specified conversations at least two talkers take part. They converse on different subjects and share various ideas. In these conversations it is talked about specific subject or contents. Moreover, the sci-

entific and professional conversations are counted among this form of conversation.

Controlled conversation

This form of the methods of conversation puts the teachers in the first place. They are the ones who lead the class according to the principle question-answer. This form is used often when the teacher is determined to achieve a certain purpose, for instance, to revise the previously-learnt material at the beginning of the lesson and then to begin teaching the new one.

Free conversation

This form is implemented when the teachers encourage the students to use their initiative and creativity, while they give them directions, help them, advise them and give them council. All of that leads to the wanted purpose – to pull out the students' knowledge, conclusion and opinions on the matter.

Brainstorming method

The brainstorming method is a simple technique that encourages different ideas and opinions or foreknowledge in a specific field of studying.

It is considered useful and widely spread and implemented in the teaching process for various reasons:

• It is simple and easy to apply in the studies without previous preparations;

• It enables the students to generate a big range of ideas;

• Teachers receive valuable and clever ideas and thoughts from their students in a short time;

• This method allows all kinds of ideas – free, open and even strange and unusual;

• Its main purpose is to provoke each student to express his/her opinions and suggestions no matter if they will end up implemented in the educational process or not;

• It is mostly useful for the beginning of the lesson so that the teacher could see which of the terms in the lesson, the students are already familiar with and to plan the teaching in that direction;

• It engages the students to be active in the process of learning and provokes their complete participation in the lesson, as one idea gives birth to another and so on.

Teachers can efficiently include this method in the educational process by taking in consideration the following suggestions:

• The brainstorming method can be brought in individually, in groups, in pairs and frontally (before the board);

• The teacher asks a question, which requires the first ideas. He/She directions the students to talk freely (frontally) or to write their ideas down (individually, in groups or in pairs) because no one would grade if they are correct or not;

• Frontally (before the board), the students present their ideas and the teachers marks them on the board without commenting them;

• Once all the ideas are written on the board, the teacher reads them without critics of whether they are good or not;

• Individually, in groups and pairs, every student shares his/her ideas with the group/the partner;

• On the teacher's invitations, the groups and pairs present their ideas and the teachers adds them on the board.

The main purpose of the brainstorming method is to create ideas in a group without judging them and consider one's ideas stranger and more uncommon than the others.

C. DISCUSSION AND DEBATE METHODS

Students in higher years are involved in this form of methods of conversation. What is specific about it is that students should possess foreknowledge in the subjects so that they could understand each other and face their different thoughts and views. All of that is essential for the organization of the lesson. That means that the teacher should prepare the atmosphere and channel the communication. Therefore, a democratic relationship between the students should be provided so that they respect opinions diverse from their own.

During the educational process, two conversational approaches should be used:

• Conversation when the teacher constantly changes the questions

• Conversation when several students answer the same question

Exercise: Gathering ideas

Method	Gathering ideas
Possibilities for implementation	⇒For gathering ideas ⇒For revising the previously-learnt material ⇒For finding alternative solutions for a specific problem
Purpose of studying	⇒Developing spontaneity ⇒Finding lots of ideas/possible solutions ⇒Increasing the concentration of the students to answer a single question ⇒Defining the structure of the subject of learning (without foreknowledge based on the learnt material) ⇒Increasing the teamwork
Ways of realization	⇒Separate the students in groups ⇒Explain the method of work to the students ⇒Every member of the group gets a sheet of paper each with a problem to be solved in 18 empty fields. ⇒Every member of the group writes his/her name in the first field and then adds ideas in the fields 2-4 (estimated time 1 min). ⇒After filling in the sheet, it is given to the member of the group, who sits on the left. ⇒The ideas from the sheet are read in order to form associations for new ideas and are written on the sheet in the empty row (estimated time 2 min). ⇒The sheet is again sent to the left. This procedure is repeated until all of the fields are complete. ⇒Analysis is carried out in small groups together with a valuation of 6 working sheets. Ideas that are repeating are omitted. ⇒The ideas are structured, united and composed so that a new formulation is distributed form the mutual ideas. ⇒The ideas are presented ⇒A selection of 3 up to 5 of the best ideas/solutions is made.
Time frame	⇒Gathering ideas for approximately 10 minutes ⇒Analysis for about 30 minutes.
Working forms	⇒Individual work ⇒Group work ⇒Frontal work
Materials	⇒Working sheet with a question and a scheme ⇒Markers ⇒Sheets in A3 format
Possible difficulties/ experiences	⇒The students might lose will to present 18 ideas. That's why the question should be well formulated (an open question) and eventually the students should be offered some help during the work in groups. ⇒If the time for gathering ideas is up and the sheet is not yet filled, it is necessary to encourage the students to collect their ideas spontaneously. ⇒It is possible for the students, who finish the tasks fast, to get bored. That's why here social abilities should be practised, as well.
Integration	⇒The chosen ideas and solutions should be used as a precondition for the upcoming work on a familiar subject or for an intensive elaboration and development of the subject in small groups ⇒Depending on the function of the result (control of the purpose of studying), it can present a base for continuing the subject in whole.

Example: Working sheet

Gathering ideas	Suggestions for advancing the lessons oriented on various activities		
Name	Idea/Solution	Idea/Solution	Idea/Solution

D. INDUCTION AND DEDUCTION METHODS

Induction and deduction are two opposing points of this method. The both of them contain certain advantages, but there's one thing they are mostly different at. The role of the teacher in the teaching process. In the classroom when the teachers use the deduction method, they lead the lessons by presenting concepts to students and then encourage them to practise the material taught in the lesson. That is why the deduction method is teacher-centred. Opposite of that, the induction method focuses on the students and use a strategy called 'noticing'. With this, the students should closely observe and listen to the teacher's lesson and then present what he/she had discovered on the matter.

Here are some opposing views from the both methods.

Deductive Method	Inductive Method
1. It does not give any new knowledge.	1. It gives new knowledge
2. It is a method of verification.	2. It is a method of discovery.
3. It is the method of instruction.	3. It is a method of teaching.
4. Child gets ready made information and makes use of it.	4. Child acquires first hand knowledge and information by actual observation.
5. It is quick process.	5. It is a slow process.
6. It encourages dependence on other sources.	6. It trains the mind and gives self confidence and initiative.
7. There is less scope of activity in it.	7. It is full of activity.
8. It is a downward process of thought and leads to useful results.	8. It is an upward process of thought and leads to principles.

Opposing views of inductive and deductive methods
Source: http://www.slideshare.net/jhunarar/deductive-and-inductive-method-of-teching

E. CONCLUSION INDICATOR METHOD

This method sums up the experience of the students during the class and everything they had learnt. It analyses their ability to separate what is most important from the lesson and present it by using various schemes like diagrams, puzzles, tables and techniques known as 'spider web', 'clever maps' and 'bunch of grapes'.

For example, the teacher can summon a student before the board and ask him to draw a 'bunch of grapes' and fill every grape with useful information he/she had learnt and share an opinion on the subject with the rest of the students.

F. METHOD OF READING AND WORKING WITH TEXT

The method of reading and working with text consists of tasks from the classes that are accomplished by reading a certain text. This method uses different sources of reading materials such as work books, student books, magazines, publications, catalogues, books and others. During the class it is important to focus on two essential activities: the reading of the text and its processing.

The texts can be both long and short. Long texts are usually easier mastered by the students with higher grades. While mastering longer texts it is crucial that the student reads the whole text first, and then ask the question – What's the text about? Later, he/she reads the text part by part and retells its contents until the student learns the important words and definitions. In the end, all parts are retold and the basic thought of the text is presented. Teachers should teach students to master not only long, but also short texts.

Text and parts of the text

An educational text is a text that refers to an educational unit and is processed and explained during the class.

The educational unit can be explained through:

- **Basic text** – This text is the most important for the student and it's a text that ought to be learnt. The basic text is separated into paragraphs and can consist of marked words in bold. The basic text can be separated into headings and subheadings, as well.

- **Additional text** – This text can be found side-by-side with the basic text. The main function of it is to make things from the basic text clearer and easier for the students to understand.

Types of reading according to the range of reading are:

- **Fragmentary reading** is in fact reading small fragments of every text. For instance, a definition, a theorem, a rule, conclusion or a synopsis.

- **Extensive reading** that incorporate the long texts. For example, a book, a song, a story and such.

Types of reading according to the way of expressing:

- **Loud reading**

- **Quiet reading** (reading to oneself)

Types of reading based on the intensity of reading:

- **Slow reading** – it is used with intensive thinking

- **Fast reading** – it is used when it is essential to pull out the important part from the basic text

Phases of reading:

⇒ **Phase I** – Sole reading (it is implemented when students need to get familiar only with a certain subject);

⇒ **Phase II** – Reading + the process of thinking (it is used when students should enumerate the elementary concepts, when certain parts from the text are compared and when it is necessary to generalize and synthetize everything that the students had learnt).

⇒ **Phase III** – Reading + thinking + expressing (here the students should put their thoughts on paper and reproduce and present what he/she had learnt both orally and by writing).

⇒ **Phase IV** – Reading + thinking + expressing + thoughtful activity (it is used when the numerous analytical and observing activities are added to the previous phase).

⇒ **Phase V** – Reading + thinking + expressing + observing + practise (it is used when everything that had been taught is added to the previous phases, only here it requires a time for practise, as well).

Advantages of the method of reading and working with text:

- It enables development of the students' knowledge;

- The same contents can be read multiple times;

- The process of reading enriches the vocabulary of the students;

- The students get the habit to use books during their studies;

- Reading improves the fantasy;

•This method gives possibility for using different types of text.

Disadvantages of the method of reading and working with text:

•With the text form the new material students can not revise the previously learnt material;

•This method adjusts to the individual abilities of the students in a more difficult way;

•This method requires a bigger mental effort and stronger concentration.

EXERCISE: Speed of reading

Choose a certain text (one chapter of your favourite book). Measure the time needed to read the chapter. Then, count the words that the chapter consists of. Separate the needed time for reading it with the number of read words and multiply the result with 60. This way, you'll get the number of words you read in one minute.

For example: (560/160)*60=120

This means that if 560 words are read in 160 seconds then the speed of reading is 120 words in a minute.

G. WRITING METHOD

Every person needs to transfer his/her own thoughts, beliefs and feelings on a sheet of paper. Basically, the letter is a fundamental tool for mutual communication, which is more often used during the educational process. Expressing the opinion with writing can be examined both form the teachers and the students' point of view.

The teacher often presents the plan of work, gives tasks, unknown words, definitions and thesis in writing.

This educational method is used by the teacher when:

•He/she brings up a new educational unit, expressing the important words, numbers or the important parts of the contents on the board with a chalk or a marker.

•He/she prepares materials for the class in advance that should be covered during the lesson.

•In the end of the class, the teacher gives tasks that the students should do as homework.

Students use the writing method every day while they study in the subjects. That's why it is clear that the method is a widely-spread and popular method to work with in the classes. Teachers should definitely consider its advantages and implement it all the time.

The most common forms of the writing method are:

Copying – This is the simplest form of the method. It is mostly used in the lower years for practising the writing technique, but it is also practised in the higher years while the students learn foreign languages.

Dictation – The usage of this form is determined by the teacher who dictates a certain text, as the students shape it by writing it down. The teacher chooses a text for the dictation in accordance to the purpose that is meant to be achieved. The students should accomplish the purpose of the dictation implementing their previously learnt material and foreknowledge in the subjects. The teachers can use a text from the student book or make a concept for their own text. The flow of the dictation should be regular, measured with pointing out the most important words and thoughts.

Supplementing a text – is a form of learning with which students develop their thinking process.

Written answers – This form is used when students express themselves during tests with writing essays.

Retelling – It is implemented in different cases throughout the classes. Often the teachers ask students to retell the text that they had just read, the film they had seen or a play, concert, book and such. The purpose of this form is to develop the ability of noticing and to combine it with the skill of expressing the opinion through writing.

Writing a report – Writing report together with the writing of essays are the most complex written texts that the students and teachers use in the educational process. They refer to events such as concerts, sport matches, humanitarian activities etc. The enactment of this method in the classes requires previously prepared information from the teachers and a presentation of the concept and the contents of the report or the essay.

Presentation of the usage of methods of working with text

Explaining the method: ***Method of working with text***

Method	Method of working with text
Possibilities for implementation	⇒For covering new contents ⇒For revising ⇒For testing the learnt material
Purposes of studying	⇒Thoughtful reading (understanding the contents of the text) ⇒Structuring/arranging texts ⇒Solemn elaboration of the contents ⇒Only the important parts of the texts are presented and then are retold again ⇒Duration of knowledge ⇒Creativity
Ways of working with text/ book	⇒Way of realization
Find headings	⇒The students are given a text separated in parts. ⇒The students search for the appropriate headings that match the contents of the part.
Answers on the questions	⇒The students receive a text with information and questions connected to its contents. ⇒They write down their answers in a notebook.
Forming questions	⇒The students get a text. ⇒They read the text and form questions on their own (How…? What…? When…? Who…? and so on).
Separating the text in parts	⇒The students receive a text. ⇒They carefully read it and separate it in various parts. ⇒They put a heading for every part.
Arranging parts (mixed parts)	⇒The teacher separates the text in parts. ⇒Then the teacher mixes the parts and prints working sheets. ⇒The students should cut the parts by themselves and order them correctly. ⇒Then they converse and order the parts. ⇒After the conversation is over the students stick the sheets in their notebooks.
Time	⇒5 to 40 minutes depending on the contents
Forms of work	⇒Individually, in pairs and in groups
Materials	⇒Working sheet with a text/questions/keywords
Possible difficulties/ experiences	⇒The questions should be well structured and the students should be offered help during the work individually/in pairs/in groups ⇒The texts should be well-written ⇒If the students need it, they should be encouraged or compared in a pair.
Integration	⇒Conversation for the solutions and filling in information if needed. ⇒Self-evaluation of the students.

Exercise: Practical example of the method of working with text

Explaining the method: *Method Scale of learning*

This method, scale of learning, is applied in the main part of the lesson during the coverage of the new material. It is meant for an individual work by the students. Everything begins with scale 1 with writing down the foreknowledge of the students and with their short oral presentation. The teacher declares the educational contents, gives material or points out a medium to ease the students' work and gives directions before each scale.

The student, firstly, reads carefully through the text and highlights key questions (scale 2), then the student compares them to the questions asked by the teacher and answers them in writing (scale 3).
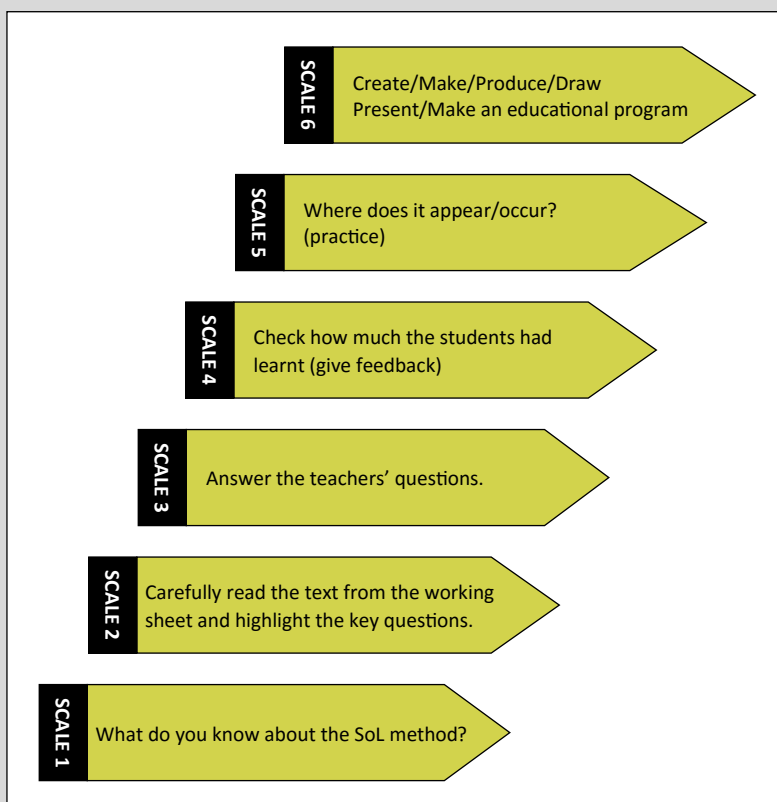
In scale 4 students verbally answer the questions from scale 3, correct them and look for additional explanations if needed.

In scale 5 and in scale 6 students make a connection between the theory and practice.

Method: Scale of learning	Teachers' activities	Students' activities
Scale 1 - Foreknowledge	(ask) What do you know about…?	(write) I know…
Scale 2 - Questions	Carefully read the text from the working sheet and highlight the key questions.	Read a text and write key questions.
Scale 3 - Answers	Answer the teachers' questions.	Answer the teachers' questions.
Scale 4 - Feedback	Check how much the students had learnt (give feedback or answer questions one by one). Compare the questions with the students' questions. How many questions overlap… Conversation: did the students cover the key elements correctly…	Compare or answer questions. If need students correct and fill in information. Compare their questions with the teachers' questions. Make self evaluation of their studying.
Scale 5 - Examples	Where does it appear/ occur…	Provide examples
Scale 6 - Practise	Create/Make/Produce/ Draw…	Create methods of work (text, schemes, diagrams, tables)

Exercise – Usage of methods of work according to the purposes of the class and creating methods of work

Method: **Scale of learning**

SCALE 6 — Create/Make/Produce/Draw Present/Make an educational program

SCALE 5 — Where does it appear/occur? (practice)

SCALE 4 — Check how much the students had learnt (give feedback)

SCALE 3 — Answer the teachers' questions.

SCALE 2 — Carefully read the text from the working sheet and highlight the key questions.

SCALE 1 — What do you know about the SoL method?

EXERCISE: Creating methods using the method of text

Scale 1. What do you know about the educational program with working with text?

Scale 2. Carefully read the text from the working sheet and highlight the key questions.

Scale 3. Answer the teachers' questions.

Questions for the exercise: Step 3

⇒In which way the teacher can make the lesson more dynamic, diverse and efficient?

⇒On which contents the dialogue method can be used?

⇒Which of the previous methods expresses the creative work of the student?

Scale 4. Check how much the students had learnt (give feedback)

Answers for scale 4.

⇒With a combination of methods.

⇒Of contents that the students have certain foreknowledge in or the contents that are connected to the life experiences of the students.

⇒The method of working with a book.

Scale 5. Where does it appear/occur? (provide examples from the practice)

Scale 6. Create/Make/Produce/Draw/Present/Make an educational program

Here the teachers group in accordance to the mutual subjects and they need to create/make an educational method – three methods (one group – a method for the introductory part, the other group for the main part and the third group for the conclusion of the class).

VISUAL LEARNING METHODS

Keeping students motivated and actively engaged in their classes can be a challenging task. However, there are some simple strategies we can use to help enhance our students' interest and keep them involved. By using visual stimuli we are more likely to maintain student attention and encourage active participation. We can also cater for different learning styles.

Abstract

The language of the 21st century is without a doubt a visual and digital one: individuals and organizations increasingly communicate, think, invent and represent reality via the creation of innovative visual and digital media content. Fields like advertising, branding, marketing, design, fashion, film, video, photography, computer games, publishing, the performing arts and television all need skilled visual and digital media professionals with managerial capabilities. These industries also offer some of the most exciting and creative employment opportunities in today's job market. Therefore, the implementation of visual aids in teaching and learning process is vitally important and needs to be developed.

Introduction

Visual thinking is a learning style where the learner better understands and retains information when ideas, words and concepts are associated with images. Research tells us that the majority of students in a regular classroom need to see information in order to learn it.

Visual learning helps students clarify their thoughts

Students see how ideas are connected and understand how information can be grouped and organized. With visual learning, new concepts are more thoroughly and easily understood when they are linked to prior knowledge.

Visual learning helps students organize and analyze information

Students can use diagrams and plots to display large amounts of information in ways that are easy to understand and help reveal relationships and patterns.

Visual learning helps students integrate new knowledge

According to research, students better remember information when it is represented and learned both visually and verbally.

Visual learning helps students think critically

Linked verbal and visual information helps students make connections, understand relationships and recall related details.

Visual thinking and learning utilize graphical ways of working with ideas and presenting information. Research in both educational theory and cognitive psychology tells us that visual learning is among the very best methods for teaching students of all ages how to think and how to learn.

Visual learning strategies such as graphic organizers, diagrams, outlines and more are nowadays commonly used in classrooms . These strategies help students of all ages better manage learning objectives and achieve academic success. As students are required to evaluate and interpret information from a variety of sources, incorporate new knowledge with what they have already learned, improve writing skills and think critically, visual learning tools help students meet those demands. Paired with the brain's capacity for images, visual learning strategies help students better understand and retain information.

There is no doubt that retention of information some time after the event is much greater when information is presented by visual and oral means than when the information is presented by the spoken words alone. The combination of sight and sound, along with textbooks is a necessary component of information retention and should be found in every experienced training organization. Using visual aids can save your teaching and learning time, especially if the subject contains information that may be too lengthy for written or oral communication. Pie charts, graphs, diagrams, photographs, video shorts and animation can often help explain subject matter quickly, and in a manner that is more easily absorbed by the learner. Time is valuable in every organization, so the importance of timely and effective implementation of training and communication should be a prime consideration. Even though implementing visual aids is quite costly as it requires having such devices as computers, projectors, models or white boards, using multiple mediums during lessons can

help students to interact and become actively involved in the learning process, which is vitally important in achieving the best results. According to research, students better remember information when it is represented and learned both visually and verbally.

H. VISUAL LEARNING HELPS STUDENTS THINK CRITICALLY

Linked verbal and visual information helps students make connections, understand relationships and recall related details. Visual thinking and learning utilize graphical ways of working with ideas and presenting information. Research in both educational theory and cognitive psychology tells us that visual learning is among the very best methods for teaching students of all ages how to think and how to learn. Visual learning strategies such as graphic organizers, diagrams, outlines and more are nowadays commonly used in classrooms . These strategies help students of all ages better manage learning objectives and achieve academic success. As students are required to evaluate and interpret information from a variety of sources, incorporate new knowledge with what they have already learned, improve writing skills and think critically, visual learning tools help students meet those demands. Paired with the brain's capacity for images, visual learning strategies help students better understand and retain information. There is no doubt that retention of information some time after the event is much greater when information is presented by visual and oral means than when the information is presented by the spoken words alone. The combination of sight and sound, along with textbooks is a necessary component of information retention and should be found in every experienced training organization. Using visual aids can save your teaching and learning time, especially if the subject contains information that may be too lengthy for written or oral communication. Pie charts, graphs, diagrams, photographs, video shorts and animation can often help explain subject matter quickly, and in a manner that is more easily absorbed by the learner. Time is valuable in every organization, so the importance of timely and effective implementation of training and communication should be a prime consideration. Even though implementing visual aids is quite costly as it requires having such devices as computers, projectors, models or white boards, using multiple mediums during lessons can help students to interact and become actively involved in the learning process, which is vitally important in achieving the best results.

Flash Cards

Large picture cards can be made from clip art, color pages, magazines. Enlarge and color the pictures and mount them on a piece of construction paper. Putting information sheets on the back of the picture allows a teacher to see the notes on what the picture is about as the children look at the picture.
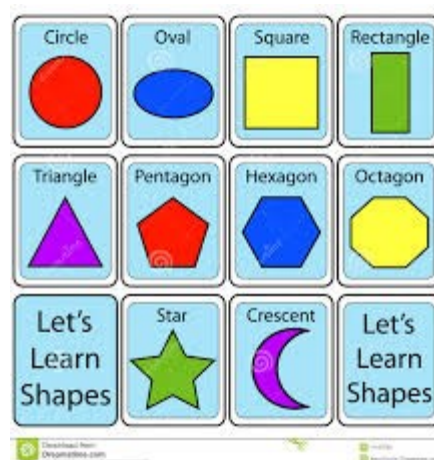
Maps

Maps can be expensive to purchase, but here's an idea to make maps. Use an overhead projector with a map copied on a transparency. Put up a piece of large paper on the wall and with the transparency shining on the paper, trace the map. If it is a map being used for several weeks, color the map very quickly with chalk. Even a very simple hand drawn map will work to show the children where things were taking place.

Flip Charts

Flip charts can easily be made with sheets of paper stapled together at the top. Using a black marker, draw simple images to illustrate the lesson. Even those who do not feel artistic can use this visual to draw simple stick figures, animals, maps, diagrams, charts, etc. After a point is drawn and discussed, flip the sheet of paper to a clean sheet. If reviewing a point, simply flip back to the picture being discussed

Graphic Organizers

Graphic organizers guide learners' thinking as they fill in and build upon a visual map or diagram. Graphic organizers are some of the most effective visual learning strategies for students and are applied across the curriculum to enhance learning and understanding of subject matter content. In a variety of formats dependent upon the task, graphic organizers facilitate students' learning by helping them identify areas of focus within a broad topic, such as a novel or article. Because they help the learner make connections and structure thinking, students often turn to graphic organizers for writing projects.

In addition to helping students organize their thinking and writing process, graphic organizers can act as instructional tools. Teachers can use graphic organizers to illustrate a student's knowledge about a topic or section of text showing areas for improvement.

Mind Maps

Mind Maps are visual representations of hierarchical information that include a central idea or image surrounded by connected branches of associated topics or ideas. It is a beneficial learning tool to help students brainstorm any topic and think creatively. Mind maps are particularly helpful in the writing process and provide students with a natural way of thinking and building thoughts on a story plot or theme.

Mind maps also provide teachers with insight into their students' thought process regarding a specific topic. By asking students to create mind maps demonstrating their comprehension of a concept, teachers are able to understand what a student's prior knowledge was and how well the student understands the assignment or the material being taught. This is a very effective way of evaluating students' understanding.

Graphic organizers are tools that can be used to visualize and organize information. Because graphic organizers are often used as prompts for students to fill in the blanks, graphic organizers provide many benefits to students who use them including:

•Helping students structure writing project

•Encouraging students to make decisions

•Making it easy for students to classify ideas and communicate

•Allowing students to examine relationships

•Guiding students in demonstrating their thinking process

•Helping students increase reading comprehension

•Making it easy to brainstorm

•Encouraging students to organize essential concepts and ideas

•Making it clear how to break apart a story into the main elements (intro, rising action, climax, etc.)
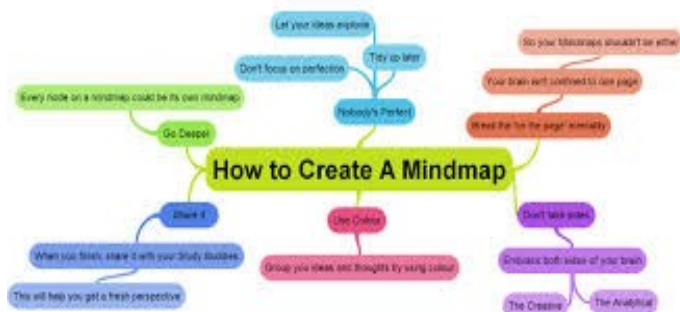
Slide Presentations

Slide presentations offer a visual element to learning material that can help students better understand the subject matter and keep minds from wandering. Powerpoint - making old things work again. The power of Powerpoint Presentation is still undeniable. Around 30'000 Powerpoint Presentations are being made every hour around the world. In order to engage your audience, one should study Powerpoint and engage new capabilities of the programme,A lot of supporting Power Point materials are available online for free, thus making the programme accessible for all. An example of free Power Point templates: http://www.showeet.com/Learing about Power Point can use books as reference http://speakingppt.com/2012/10/09/35-best-books-on-presentations/

Another user friendly option for successful presentations is http://prezi.com/

Prezi is an easy-to-use program, and the presentations can be tailor-made according to different topics. . There is a variety of templates for choice as well.
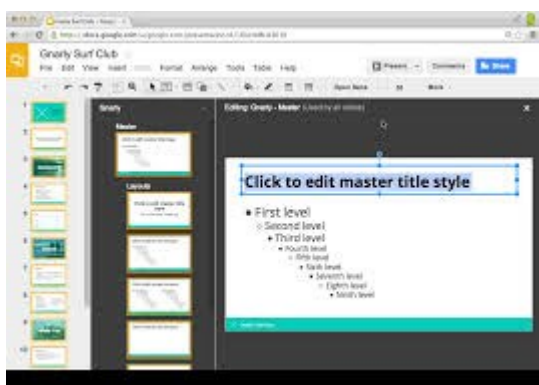
Displays

In some cases, hands-on training is most effective for student comprehension. When a student is being trained on a complicated piece of equipment, it is more effective to show the student how the equipment works firsthand than giving them books or manuals to read.


Handouts

Handouts serve to reinforce oral and visual components, and can go into further detail if desired or warranted. Handouts allow participants to follow along with presented information, make notes, formulate questions or refer to key points in the future as a "refresher course." For individuals who learn more effectively by reading than other means, handouts are an important part of business training and communication. Adding short quizzes and "fill in the blank" sections to handouts helps reinforce to material, and engages the participants in the process.

White or black board

White or black boards can be very useful to help explain the sequence of ideas or routines, particularly in the sciences. Use them to clarify your title or to record your key points as introduction to the subject matter.
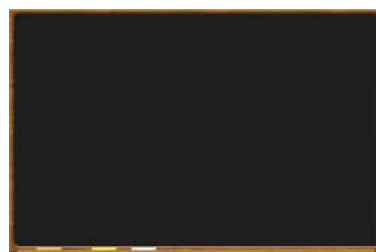
Cartoons

Appreciating this distinctive form of artistic expression is not, however, simply a matter of finding them amusing – it is more about understanding the context of the issue addressed, identifying the perspective of the cartoonist, and agreeing or disagreeing with that perspective. The most effective cartoons are those that use cleverly constructed visual satire to illustrate a point of view and which elicit a response from the viewer.

Developing students' ability to interpret the work of cartoonists contributes to a deeper understanding of contemporary issues. It can, for example, serve as a vehicle through which students develop an ability to identify bias and formulate opinions. This advanced level of analysis occurs when students develop a knowledge and understanding of the context to which the cartoonist alludes and

master the skill of cartoon interpretation. In other words, the student cannot be expected to appreciate fully the point of view crafted by the cartoonist until they have acquired an appreciation of circumstances surrounding the issue and developed the ability to identify and interpret the tools and techniques cartoonists use to communicate with their audience.

Teaching students the steps involved in analyzing cartoons involves: developing a knowledge of the context to which the cartoon alludes; building the ability to recognize the visual and non-visual elements of cartoons and the way in which the cartoonist combines these to communicate an opinion; developing the capacity to discern the cartoonist's perspective.

Asking students to draw their own cartoon on a selected issue is an excellent way of assessing conceptual understanding. It can also be used to challenge gifted and talented students. As an instructional strategy, cartoon drawing enables the student to:

•apply their knowledge and understanding in ways that demonstrate and enhance their critical thinking skills;

•be creative and original in their thinking;

•utilize symbols and visual metaphors to communicate sometimes abstract/complex concepts to an audience;

•draw on their general knowledge and apply it in contexts;

•explore and clarify their own value system.

Using cartoons helps us introduce humor into our classes, therefore it makes classroom climate conductive to learning.

There are a number of benefits to using cartoons in teaching. It can help us.

Videos

There are many pluses of using video in education as several decades of research have shown. Recently, Willmott et al (2012)show that there is strong evidence that digital video reporting can inspire and engage students when incorporated in student-centered learning activities through:

•Increased student motivation

•Enhanced learning experience

•Development of learner autonomy

•Enhanced team working and communication skills

•A source of evidence relating to skills for interviews

•Learning resources for future

There are a lot of ways videos can be used in education to enhance learning:

•Recording live lectures

•Developing instructional videos

•Interviews

•Engaging students

•Case studies/simulations/role plays

•Presentation skills and performance

•Learner generated

For many teachers, the beginning for self-generated educational video is recording live lectures. Such lectures provide flexibility for students and opportunities for revising content according to the learner's pace and needs.

Learner-generated video can support better thinking skills as students produce their own content.It suits perfectly to larger groups where production tasks should be clearly assigned.

Role play and simulations are forms of learning where students can experiment with different behavior and responses this way gaining a greater insight into the issues providing 'real life' context and emotional impact.

The aim of Presentation skills and Performance style is to capture, review and enhance the performance of a group as well as of an individual through reflection and discussion. This approach promotes self directed learning, increases motivation and encourages learners to find their own solution.

Engage class with video making. Video making is easier than you think - all you need is a program like Adobe Premier or Corel Video

A good example of the power of videos on people's minds is outlined in the FAQs of Kickstarter – a mass financing programme:

•Videos are not required to launch, but projects with a video succeed at a much higher rate (50% vs. 30%), and they also raise more money. So we highly recommend that you include one!

•People's sight is naturally drawn to moving objects, thus video-making is an important visual technique.

•Youtube.com can be used as a source as it offers huge amount of different material for use in the lessons.

Films

Not only videos but also films can be really beneficial for teaching. Some films are great for developing business skills and creativity. Though it might seem an area where you would not think of watching films as a first choice, but films do help to generate a discussion, to compare how business used to be done and how it is done now, to set a business like atmosphere etc. Watching a film can provide you with a lot of new ideas, help you to pay attention to cultural differences and see how things might be done in different ways.

When choosing a film trailers might be really useful. When you know what the film is about you can assign students watch it at home and get ready for class discussions or other tasks. It can also be helpful to read reviews and discuss them with students after they watch a film. You can read them online or offline. Here's one of the websites you can find reviews:

IMDb (http://imdb.com)

Smartboards

David Martin began SMART company in 1987 as the Canadian distributor for a U.S. projector company. The revenue it collected from the projectors was put into research and development on the SMART board interactive whiteboard, which was the first interactive whiteboard to provide touch control of computer applications and the ability to write over standard Microsoft Windows applications.

The Smart Board interactive whiteboard operates as part of a system that includes the interactive whiteboard, a computer, a projector and whiteboarding software - either Smart Notebook collaborative learning software for education, or Smart Meeting Pro software for business. The components are connected wirelessly or via USB or serial cables. A projector connected to the computer displays the desktop image on the interactive whiteboard. The whiteboard accepts touch input from a finger, pen or other solid object. Smart Board interactive whiteboards are also available as a front-projection flat-panel display – interactive surfaces that fit over plasma or LCD display panels.

Most models of Smart Board include a pen tray on the

front of the interactive whiteboard that holds two to four plastic pen tools and an eraser. The pen tools have neither electronic components nor ink - the technology is in the pen tray. When a pen tool is removed from its slot in the tray, an optical sensor recognizes its absence. Smart Board software processes the next contact with the interactive whiteboard surface as a pen action from the pen tool that resides in the corresponding slot. Older models of the Smart Board interactive whiteboard features slots for black, blue, red and green pen tools, although a control panel can be used to change the color of the digital ink or change the pen tools to colored highlighters.

Using just a finger, you can control computer applications, write notes, pull up charts and images, search the Internet, play videos, distribute the lesson to the class and save your work. It is ideal for whole-class teaching as it not only removes the need to have large groups huddled around a single computer screen but also involves students in the lesson.

Most teachers understand the "why" but struggle with the "how". Here are some ideas on how you can use Smart Boards.

- Use it as a tool for note-taking. Students can come and write important points on the board. Alternately, you can appoint a student to type out notes on the computer while you talk, so that the other students can view and take them down.

- Brainstorming in the classroom can be fun with a Smart Board. You can not only put together text/ideas but also images, diagrams or videos.

- Classroom games can be played with ease on the board. Board games in particular can be played on the board itself.

- All forms of media– videos, photographs, graphs, maps, illustrations, games, etc. – can be used on the board, making it incredibly dynamic in nature. This expands the range of content that you can use for teaching or presenting new information.

A lot of new software is available for free on the internet that can be easily integrated. There are many forums and websites that aim to help teachers by providing Smart Board ideas and activities. Explore these for more ideas.

The Smart Board is tomorrow's technology and is bound to change the look of classrooms forever. Using smart boards in your classroom can help you stay ahead with technology that could make the education process simpler and perhaps even more productive.

Teachers can find lesson plans for Smart Board and connect with teachers from other counties at http://exchange.smarttech.com/search.html

Download Lessons

Interactive Internet sites

Center's Notebook Templates	Templates for the SMART Board categorized by grade level
Center's SMART Ideas Templates	Lesson ideas for SMART Idea use
Center's Collections	Several additional collections to add to your computer's SMART Notebook gallery
Edcompass Notebook lessons	Search and download SMART Notebook pre-made lessons
Edcompass SMART Idea lessons	Search and download SMART Ideas pre-made lessons
UK Notebook ideas	Elementary resources from the UK
SMART and getting smarter!	Curricular downloadable lessons and quick tutorials
Wichita Public Schools	Download interactive lessons from Wichita Public Schools

|	
Interactive websites	Several curricular areas where grade level has been indicated.
Ambleside Primary	More interactive sites for your SMART Board - clocks, number grids, number lines, The Decifractator for decimals and fractions
Whiteboard Tools	Tools for numeracy strategies - fractions, number lines, symmetry, thermometer, etc.
Primary Interactive Resources	Math, Literacy, Science and other subject categories for interactive use with the SMART Board
SURWEB Media Shows	These are more of an explanation of objectives rather than interactive activities or "shows". Great explanations and pictures.
Interactive Math Manipulatives	A collection of math manipulatives for SMART Board use.
Read, Write, Think	Online student graphic organizers, Venn diagrams, timelines, plot structures, etc.

Tablets

Choosing a Tablet for the schools educational needs is not so easy. Price needs to be balanced against tablet features. Main considerations are:

Operating Platform: Apple, Android, or Windows?

- Android: Android offers the most free apps. Standards are improving following enhancements to the Play Store and security settings. Make sure your version of Android can access Google Play.

- Apple iOS: All apps must be authorized, which means less free apps. You may need support from your IT department with the set up (though this is easier if you are using a suite of Apple products).

- Microsoft Windows RT: This system is used with Windows Surface Tablets with Windows 8 systems, and Windows 'Metro' Mobile Devices.

- Internal Memory

- Durability

- Preventing Access to Unsuitable Websites

- The Best Screen Size

- Battery Life

- Screen Resolution

- Make Sure the Tablet can Integrate into your Virtual Learning Environment

Teachers are very keen to make full use of the tablets. It is unfortunate that there are no training facilities or applets in Lithuanian language, because the tablets has "not recognize" some technologies. One of them – Adobe Flash. For example, during the lessons of nature cannot be used project-based curriculum "ICT-based development and deployment of integrated natural sciences course" of 5-6 grade students modeled in 2009, it was recognized as one of the top five "E-learning and education" category in the international competition World Summit Award.
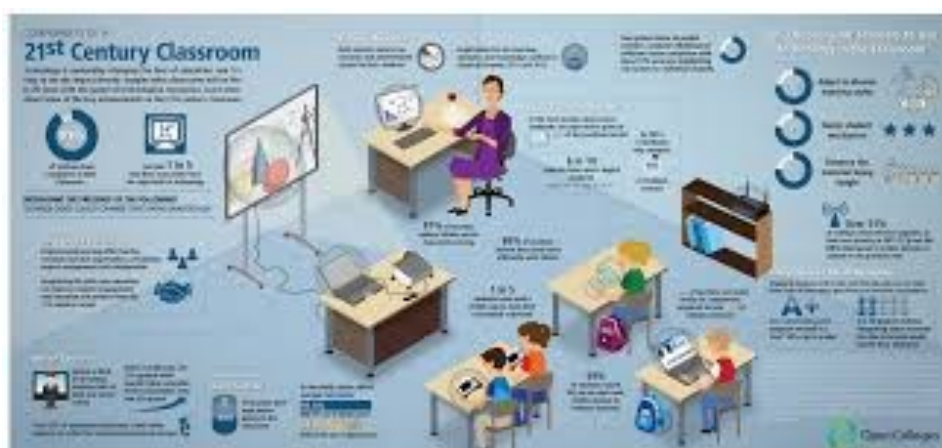
I. PRACTICAL USE OF VISUAL LEARNING METHODS

At our school students learn economics and entrepreneurship for three years.The first year is pure theory or basic things of applied economics. Two other years include one lesson of theory and one practical lesson a week.

To make theory more attractive to our students we use some economical games. Very popular amongst students are games called MESE and Banks in action. Both games are computer games which show real market of production company (MESE) and how banks work (Banks in action). In the lessons we analyze reports of companies' activity and take new decisions. Programs include possibility to show different graphics to illustrate how the decisions they have made, work. For every lesson we print companies' reports and show graphics on displays.

Games are played at Lithuania, Europe and world levels.

One more part of teaching is creating of the so called
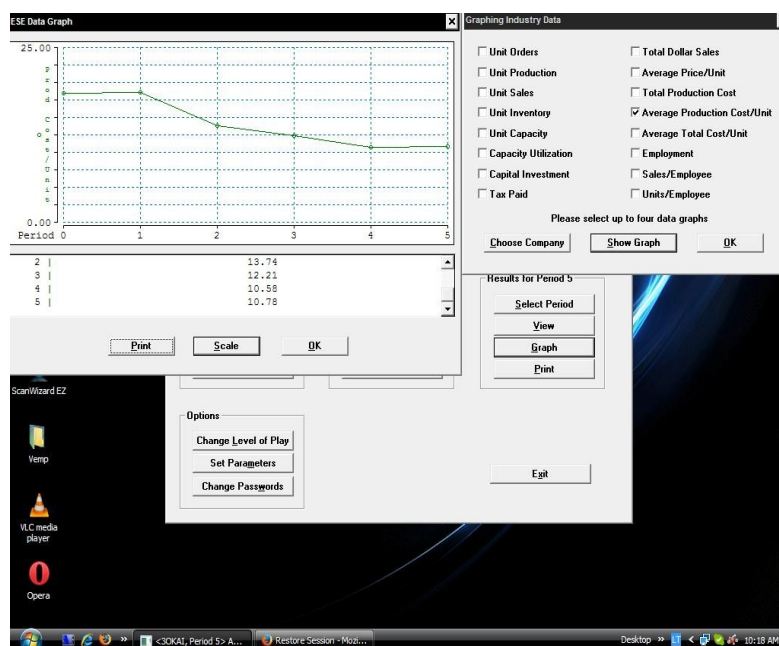
practical students' companies. First step is generating business ideas. We use blackboard for writing ideas of brainstorming. When ideas are voted using flash cards we start the second step- creating logos of companies and for that we use such graphical program like Gimp. We create letterhead for Students Company and use for this purpose Open Office Writer. After that we start market research. We use many different methods for market research like survey, Facebook and etc .A very interesting step is selling each company's shares. Only students who believe in successful activity of student's company want to buy shares. So students have to make presentations of their ideas to convince their colleagues to buy shares. We use Open Office Impress program to make presentations. Next step is practical activities of students' companies. They write financial, marketing, HR, production reports once a month. They present reports to

their shareholders. Most of students' companies have consultants who are from businesses. They advise students how to make the company more profitable. And in the end of each teaching year we write final reports and close students' companies.

A very useful method is visiting companies with our students and having people who work in Utena's industry or service sector. They are able to explain some topics better from practical view. Our school even has some agreements with the firms who like to cooperate with young people.

Trade fair of students companies. They are organized all over the world and our school takes part in the fairs in Lithuania every year. We try to take part in trade fairs of students companies in the neighboring country like Latvia and Norway.

J. METHOD OF DEMONSTRATION

Demonstration is a method that shows what can be perceptive in teaching. The method involves the demonstration of various complex didactic activities of the teacher. Students can demonstrate different movements, processes and actions depends on the teacher. In the demonstration should be triggered as many senses depending on the nature of the material that students need to master.

The demonstration is an important relationship between perception and opinion. When attention is directed to the student of the most important details of shownobject or phenomenon, the teacher will guide students to think carefully. Demonstrating differs from random monitoring or observation of the object or phenomenon. It is implemented with preset order and must be well organized and run.

Before you start the demonstration teacher must make sure that the method of demonstration is the most appropriate method for overcoming teaching unit. The teacher must make prior arrangement and order of presentation of the object or phenomenon. Before it began the teacher should be well prepared so that it is necessary to choose the demonstration facility, Examining his properties, then focus on the students to the structure and composition of shown object or phenomenon, especially to its most important elements of eventually require students to repeat the process of demonstration, applying rules that previously showed the teacher.

The number of facilities for the demonstration should be large but should be optimal, and demonstration to be done gradually and not the speed and superficial.

The student needs to perceive an object with as many senses and through the process of connecting you to form impressions and acquired knowledge. The teacher draws the attention of the student to what is most important object of the demonstration.

Items can be demonstrated in the enlarged and reduced size.

For the method of demonstration is necessary to achieve:

⇒Preparation for demonstration

⇒Suitability Assessment method

⇒Perception of students

⇒Thought process among students

Forms of demonstration

• Demonstration of natural (solid) objects and processes. Demonstration of static objects is demonstrating parts of an object in three aggregate states.

• Demonstration, drawings, graphs, charts, maps, etc. This type of demonstration display comprising the structure of the objects and their most important properties. If students need to learn about the subject in more details should be used images from all its sides.

• Demonstration of movements and exercises. This type of demonstration is used when displaying the dynamic structure of the work. The teacher describes the tools and material that works. He slowly and carefully performed movements. The goal is not that students are familiar with the activity but also to learn how it's done.

• Demonstration of dynamic effects are applied when studying processes in nature that have dynamic change. Often it takes study visits, study of technological processes, excursions etc.

Advantages of the method of demonstration

⇒Acquiring knowledge in the most natural and efficient way.

⇒Develop the ability of observing and watching.

⇒Activation of multiple senses in the learning process.

Disadvantages of the method of demonstration

⇒Inability to demonstrate dangerous objects, large objects, processes, events and more.

⇒abstract concepts and knowledge can not be demonstrated.

⇒The method of demonstration is not in itself sufficient to

acquired relevant knowledge.

K. METHOD OF ILLUSTRATED WORK AND DRAWING

Drawing is human need with lines and colors to express their understanding of the environment that surrounds it. The method of drawing is based on the skill of the children drawing which confers student at early age, and used almost a lifetime of learning.

Drawings can be divided according to several criteria, including:

⇒**Drawings under the scope**: facing towards, pattern, detailed drawing

⇒**Drawings size**: shrink paintings , enlarged drawings and paintings in natural size

⇒**Drawings by degree of expression**: copying, redrawing, finished drawing and more.

⇒**Drawings by purpose**: drawing for something to say, drawing only to show, entertainment.

⇒**Drawings of expression**: drawing on observation, drawing on memory, drawing fantasy etc.

Types of illustrated cases

Drawing as a method in teaching has different outgoing forms that can be used to gain a better understanding and perception of terms and events that are being studied. The main forms of drawing can be singled out:

Graphical symbols - graphic symbols are unambiguous and relate to general concepts, feelings, thoughts, etc. Unlike signs that are more significant.

Charts and diagrams - with charts and diagrams express quantitative relationships and sizes. Commonly used poles, pies, lines, pyramids, circles and more. This form students get a clearer picture of a particular phenomenon that contributes to easier remembering knowledge.

Schematic drawing - schematic drawing of objects used for structural or spatial relationships among objects and certain situations.

Drawing on the basis of observation - this type of drawing is used when students need to acquire knowledge about the composition and structure of the object or phenomenon that observe. The successful transfer of the case to the surface for drawing students should know the subject in all its details.

Illustration of the story - this form is used when drawing their own experiences and illustrate the written text. When using this form of illustration it's not necessary technical knowledge of drawing to capture the notion of or understanding of written text.

The teacher's classroom and lesson often used simply drawing in order for students to have approached the new teaching material.

The education is necessary illustrated using applications in all subjects (languages, mathematics, history, nature and society etc.).

Teachers who have a sense of artistic expression should often use this form of teaching and thus to increase the interest of students for the teaching

material.

EXAMPLE:

Perceptual thinking should be promoted.

If you start arranging the odd numbers starting from one, will always get as a result of a number square.

⇒$1 + 3 = 4 = 2^2$

⇒$1 + 3 + 5 + = 9 = 3^2$

⇒$1 + 3 + 5 + 7 = 16 = 4^2$

The question is, how could present the mathematical legality another perceptive way, who would develop student creativity.

If the numbers are represented as boxes stacked on one another and if you collect all the rows will get 1 + 3 + 5 + 7th.

Now with a vertical line can be cut off a piece of the pile cubes and should prove to be chamfered part of cubes fits the other side of the pyramid, forming a square. It will always be so regardless of the size of the pile cubes

2
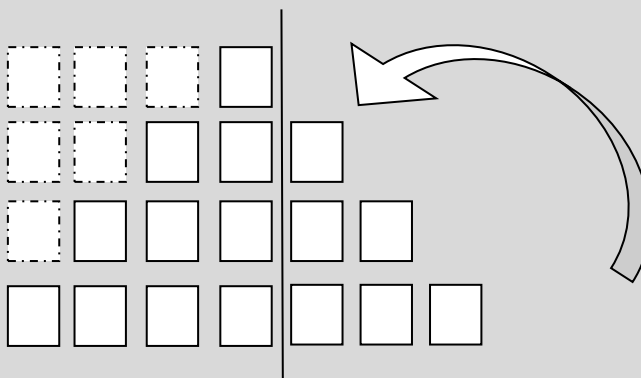
ACTIVITIES TO ENCOURAGE STUDENTS CREATIVITY

Chapter Overview

PLAYFUL TEACHING OF BUSINESS PRINCIPLES – AN ARGUMENT IN FAVOUR OF THE PEDAGOGIC-DIDACTIC PRACTICAL PRESENTATION OF CONTENT

Wouldn't it be just wonderful to have exercises that capture the interest of your students and help you convey knowledge of business principles and processes in a simple and seemingly playful manner? This manual is intended to support you in expanding your repertory of teaching exercises and to encourage you to develop exercises of your own.

Five observations on the objectives of this exercise manual:

1. "Playful teaching" is a marker of subject-related pedagogic competence

Good "games" – or exercises, as they are mostly called on the secondary level – are a "treasure trove" of didactic material for teachers, as they represent a unique interplay of objectives, content and methodology (see Figure. 3-2), attuned to the students' cognitive skills. This makes them a marker of subject-related pedagogic competence.

The term "game" describes an activity that is carried out purely for pleasure, and this joyful spirit is the key to suc-

Figure 1-2: Didactic triangle showing an orientation towards conveyance or discovery

cessful "exercises". "Learning and simulation games" are activities whose content, structure and processes are designed on the basis of didactic principles and with a pedagogic intention in mind. Used adequately, games can stimulate students in class, but they should always be accompanied by meaningful reflection ("follow-up activities").

2. The teachers' perception of their role is determined by their understanding of learning processes

The "didactic triangle", based on a concept developed by Ruth Cohn (cf. 1997), describes the interdependencies of

the three components "teachers", "students" and "topic" in the process of teaching and learning. It shows how the approach you choose when planning your lesson (see Figure. 1-2) will influence the concept of business principles that your students develop. This means that your teaching method will have a significant impact on your students' understanding of business principles.

If a teacher in an economics class, for instance, gives a theoretical lecture on sales contracts, students will process the topic abstractly. If the teacher chooses an activating method, however – e.g. the exercise "Closing deals with negotiating skills", in which students first negotiate a deal and then compose a written contract for it – the teacher-student relationship and the role of the teacher will change, with the teacher becoming the coordinator of the learning process. The students will then process the topic in a different way; in this case, they will experience (first-hand!) that deals can be negotiated and recorded in writing in a sales contract.

3. Encouragement is important for the social and communicative environment in class

The social and communicative relationships between the individuals involved in the learning process (see Figure 2-2) is of central importance for teachers in their lesson management. After all, teachers provide a service of communication. They should encourage students and help them improve and reflect on their working/learning processes. Encouragement changes the students' personal attitude, boosts their confidence in their own abilities and enhances their self-respect. An atmosphere of mutual respect and bi-lateral communication between teachers and students is an important prerequisite for successful learning.

4. Successful lessons require a variety of methods

In order to adjust their lessons to the educational task at hand – including the individual requirements for the conveyance of content and the acquisition of competences – teachers must have a varied repertory of teaching methods (cf. Meyer 2004, pp. 74-76).
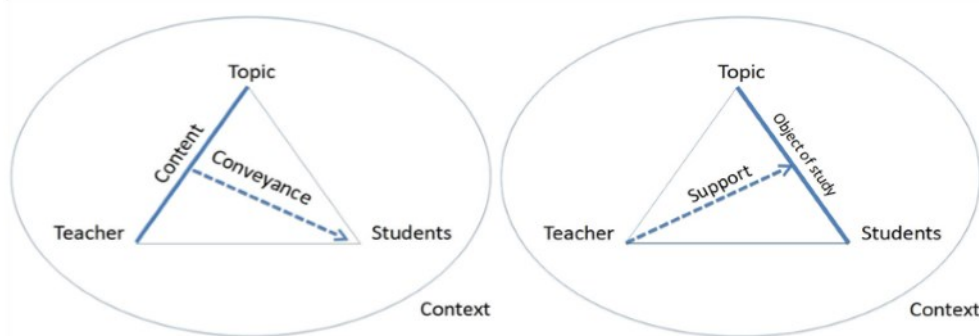
This exercise manual is inspired by the "methodology modules" concept by Aff/Grohmann/Kögler (2000), frequently used for teacher trainings in business didactics. Methodology modules show how a variety of activating elements and presentation techniques can be used to convey a certain topic. Some exercises are based on presentation techniques that may also be used for other topics (see Figure 3-2 micro-method). Other exercises rely on larger methodical complexes for their teaching/learning arrangements (see Figure 3-2 meso-method).

Of course, nobody will immediately be an expert on all games/exercises. Like learning, "playing" progresses from simple to complex processes. This is true for students, but also for teachers (cf. Lindner/Peter 1997, pp. 250-251). Teachers must use exercises authentically, which means that the practical application of one exercise (or method) may vary considerably from one teacher to another. Furthermore, successful learning requires that students reflect on what they have learned.

5. Expanding your repertory

The exercises presented in this manual range from initial activities (to introduce a certain topic) to concluding activities (to ascertain learning results). Each exercise comes with a task description and worksheets. I hope that you and your students will have fun with these exercises!
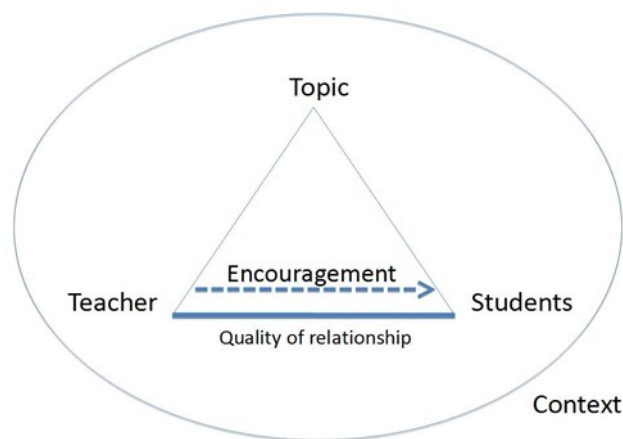
Figure 2-2: The quality of the relationship between teacher and students influences learning success
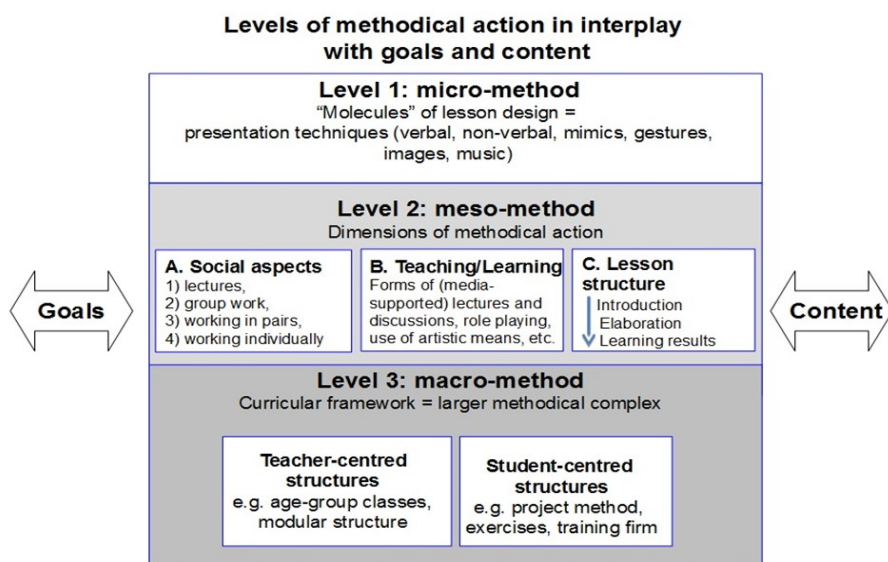
Figure 3-2: Levels of methodical action in interplay with goals and content, cf. Meyer 2002, pp. 111-112.

A-Z list

Goals	Knowledge alphabets enable students to access existing (or, in some cases, buried) knowledge more quickly, which is why they can be used at the beginning or at the end of a learning process.
Participants	Up to 30 participants
Time	2 to 30 minutes (depending on the number of steps)
Prepare	•A-Z lists
	•Sheets of paper for each student
	•Flip-chart paper for poster

Step by step

Step 1 / Task description, individual work:

Ask the students to make an A-Z list of terms that they associate with the given topic. They should choose the terms quickly (2 to 5 minutes) and spontaneously.

Step 2 / In pairs:

Each student compares his/her results with that of another person and adds any interesting terms to his/her own list. Unclear concepts/terms are mutually explained.

Step 3 / In class:

Compile a joint A-Z list on a poster and put it up for the entire class to see (if possible, leave the poster up for some time).

Author   Johannes Lindner

The elevator game

|	
Goals	The goal of this exercise is to engage students in improvised conversations and to encourage them to take an interest in a certain topic, think independently and form their own opinions. The exercise may for instance be used to wrap up the reading of a newspaper article, as the students will summarise the article while talking to each other.
Participants	1 to 4 participants per elevator ride
Time	5 to 10 minutes
Prepare	•Newspapers for students •Draw an elevator on the board.
Step by step	**Step 1 / Individual work, reading:** Ask the students to select interesting articles from the business section of a newspaper and to read them through. **Step 2 / Simulate a conversation during an elevator ride:** Invite a few volunteers to step into the elevator with you. Simulate a conversation about the newspaper and its articles. Depending on the flow of the conversation, you or others may also enter/leave the elevator. **Step 3 / Wrap-up:** Analyse the selection of "interesting" texts (What makes these newspaper articles interesting?) and the content summaries given (Did the students discuss the main points of the article?). **Alternative:** Use this exercise for any content (e.g. a business idea) that students should be able to present in a brief and concise manner (e.g. between two floors during an elevator ride).
Author	Johannes Lindner

The tree of ideas
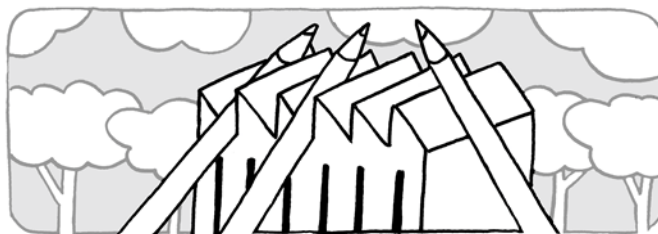
Goals	This exercise enables the class to discuss the core components of a company from the roots up – on the basis of existing knowledge – and to expand their relevant knowledge. The tree serves as a visual and structural aid.
Participants	Up to 30 participants
Time	About 45 minutes
Prepare	•Several sheets of packing paper
	•Post-it notes
	•Pens
	•Sufficient space for the exercise

Step by step

Step 1 / Form teams:

Form teams of 5 to 6 students. Each group is given a sheet of packing paper on which the team members draw a tree with roots, trunk, branches and leaves. For this purpose, the paper is put on the floor. The drawing should take up the entire sheet and it is important that all members participate. Detailed representations may be allowed.

Step 2 / Decorate:

The tasks are assigned once the tree has been sketched roughly. The teacher provides enough post-it notes in various colours.

A). Task for the roots:

What is our common starting point? What is at the root of our joint actions (e.g. knowledge, experience, curiosity)?

B) Task for the trunk:

What are the goals of a company?

C) Task for the leaves:

The leaves represent the students' ideas of what a company needs to be successful. Examples: "Collaboration, communication, active participation, exchange of ideas".

Author

Johannes Lindner

Collage: Developing personal prospects

Goals

The students will visualise what they want to achieve in their private and professional lives.

Participants

Up to 30 participants

Time

30 to 50 minutes

Prepare

- Packing (or flip-chart) paper
- Magazines
- Scissors
- Glue
- Glitter
- Adhesive tape

Step by step

Step 1 / Individual work:

Ask the students to define categories they consider relevant to their personal success and to write them down as shown in the sample chart.

Step 2 / Individual work:

Hand out paper, magazines, scissors, glue, adhesive tape and glitter. Ask the students to search the magazines for images they associate with their personal and professional goals and to cut them out. The students may also cut out phrases, words or quotes that match their ideas and interpretations. The clippings should then be attached to the chart in the respective categories.

Step 3 / Presentation:

After the collages or charts are completed, students should present their work to their peers. The students should take turns to explain how their charts symbolise their vision of "success in life and business". Encourage the other students to ask questions after the presentation.

Sample chart for a collage showing personal goals for private and professional success:

Annual Theme	YEAR 1	YEAR 2	YEAR 3
Spiritual success			
Intellectual success			
Physical success			
Emotional success			
Professional success			
Financial success			

Democratic decisions, or

The art of sharing a pumpkin

Goals	This exercise enables students to reflect on their approach to decision-making and suggests solution-oriented strategies instead of desire-oriented strategies. The concept of the four steps of democratic decision-making is applied to specific everyday problems in order to show how to consider the principle of equal rights for all parties involved before reaching a compromise or a majority decision in a situation where parties express conflicting desires.
Participants	Up to 30 participants (three volunteers)
Time	50 minutes
Prepare	•A (plush) pumpkin
	•Flip-chart paper and pens
	•Write down the steps of democratic decision-making on cards.
Step by step	**Step 1 / Task description:**
	The three volunteers sit around the pumpkin and the other students sit down in a circle around them. The teacher explains that each of the volunteers wants to have the pumpkin. The other students should now suggest ways to help them. All suggestions are listed on the flip-chart. After the concept of the four steps of democratic decision-making has been presented, the suggestions are revised.
	Step 2 / The steps of democratic decision-making:
	1.Examine the conflict at hand / identify needs and desires.
	2.Change the situation to find a creative solution to the problem.
	3.Equally impose restrictions on all parties involved (compromise).
	4.Vote to reach a majority decision.

Step by step

(continued)

Ad 1.: First, it is important to identify the needs and desires of the individual parties to find out whether there really is a conflict. Someone may have suggested sharing the pumpkin by dividing it into three parts. The teacher should ask whether this solution is acceptable, which leads to the question: For what reason do the parties need the pumpkin? The volunteers will answer this question. They may for instance need the pumpkin as Halloween decoration or to make pumpkin soup from its flesh or to roast the pumpkin seeds, etc. This means that, depending on the scenario, the pumpkin may well be divided in a way that imposes no restrictions on any of the parties.

Ad 2.: The teacher asks what should be done if it turns out that all three parties need the pumpkin flesh. The students may suggest sharing the pumpkin. The teacher should then ask them to explain the assumptions on which this suggestion is based. Once the relevant assumptions about the situation have been explained, they should be tested. Here are some examples:

> Assumption 1: There is only one pumpkin. Counterargument: It might be possible to obtain additional pumpkins. If this is the case, the problem has been solved. If not, discuss the next assumption:

> Assumption 2: There is only enough money for one pumpkin. Counterargument: Additional financial means may be available and additional pumpkins may be bought. If this is the case, the problem has been solved. If not, discuss the next assumption:

> Assumption 3: All three parties need the pumpkin right now. Counterargument: Maybe only one person needs the pumpkin immediately and the other two could wait until a later time.

These examples show how a (hurried) decision is often reached on the basis of many implicit assumptions. While this decision may seem democratic at first glance, it may still be unsatisfactory, as the parties' actual needs have not been thoroughly assessed. Such a decision may result in further conflict.

Ad 3. and **4.:** The teacher confirms the implicit assumption that all three parties need the pumpkin at the same time. It may be suggested to cut the pumpkin into three equal parts. This might be a satisfactory solution in the given circumstances. But which decision should be made if the object in question were something that could not be divided, such as a car? The right to use the car could be distributed equally among the parties or there could be a vote about who needs the car most urgently and should therefore be allowed to use it.

The latter solutions – the equal restriction of the respective needs of all parties (compromise) and the majority vote – represent the third and fourth step of democratic decision-making and should be implemented only after the first two steps have been tried.

Step 3 / Wrap-up:

This exercise will give the students much to think about. Ask them to reflect on how these new insights may be applied to everyday situations – at home, in class or in a company.

Inspired by

Ulrich/Henschel/Oswald 2001, pp.137-147

Socrates: The triple filter test

Goals	This exercise in reflection provides an opportunity to discuss the issue of rumours and false claims. It is a true "classic", based on an anecdote about Socrates.
Participants	Up to 30 participants
Time	15 to 20 minutes
Prepare	●Copies of the text for the students (see below) ●Sheets of paper for each student
Step by step	**Step 1 / Text:** Read the text aloud. **Step 2 / In pairs:** Discuss the tasks briefly and write down three thoughts. **Step 3 / In class:** Discuss the three thoughts each team has written down, maybe reach a class agreement to be careful about "passing on" stories, etc.

Text: The triple filter test

One day a man met the philosopher Socrates and said: "Listen, Socrates, I need to tell you something about one of your friends." "Hold on," Socrates replied. "Has what you want to tell me passed the triple filter test?" The man looked at him uncomprehendingly, so Socrates continued: "Before you even open your mouth, your thoughts should pass through three filters. Listen closely! The first is the filter of truth. Have you made sure that what you are about to tell me is completely true?"

"No, I have only heard about it." "Well, then. I expect you have at least considered the filter of goodness. What you want to tell me is a good thing, right?" The man hesitated, then answered: "No, on the contrary." "I see," said the philosopher. "Let's try the third filter, which is usefulness. Is what you want to tell me useful?" "Useful? Not really."

"Then we should not be talking about it at all," Socrates concluded. "If what you want to tell me is neither true nor good nor useful, I'd rather not know about it. And I recommend that you forget about it, too."
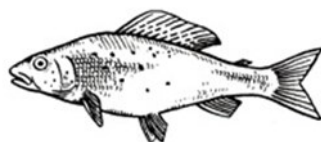
[Traditional story about the philosopher Socrates, 470-399 B.C.]

Tasks:

A.Sometimes, we can hardly wait to tell others about things we have heard. But passing on rumours and hearsay without checking the facts can be dangerous. Why?

B.What do you think of the triple filter test? Write down three thoughts.

The fishing game, or

The path to sustainable management

|	
Goals	• This exercise allows the participants to observe certain patterns of behaviour, which in reality may take decades to develop, in a short time span.
	• The participants will develop an understanding of how quickly and unexpectedly things that are common property can be destroyed.
	• They will gain insight into how groups may improve their communication processes by trying to define and solve problems.
	• The exercise will also reveal the problems that a "free rider" may cause for a group whose members are trying to find a compromise that serves their long-term goals. A "free rider" is a person who tries to benefit from the group's long-term strategy without paying the price in the here and now.
Participants	The entire class
Time	The game lasts 6 to 10 rounds (with each round representing one year). The number of rounds depends on the time you have at your disposal. Each round takes about 5 minutes.
Prepare	• You will need an opaque container (e.g. a coffee tin) that can hold 50 coins and is big enough for you to put your hand in and take out coins. Put 40 coins in the container at the start of the game. Make sure you have a total of 200 coins (e.g. one-cent coins) and put the remaining coins in a different container to which the participants have no access.
	• You will also need numbered paper cups (representing boats) and index cards, one of each per team.
	• Arrange chairs in little groups with enough space between them so that the individual teams cannot overhear what the other teams are talking about.

Step by step

Step 1 / Form teams:

Form 3 to 6 teams of 2 to 6 students each. Introduce the exercise by saying: "Each of you has just become a member of a fishing company. We will start with a sea full of fish." [Hold up the coffee tin and shake it to make the coins rattle audibly.]

Step 2 / Explain the rules:

"The goal of the game is for each team to maximise their wealth. For this purpose, each team is given a modern fishing boat [hold up a paper cup].

Each fish you catch is worth _____ (e.g. one cent). The sea holds a maximum of 50 fish. At the start of the game there are 25 to 50 fish. The game lasts 6 to 10 rounds, with one round representing one year. In each round, your team will decide on how many fish you want to catch this year. Write down the number of fish you want to catch on your index card and put it in your boat (i.e. your paper cup). Pass your boat to the game host.

The game host processes the requests in a random order. The fish (= coins) you catch are handed back to you in your boat. If your order exceeds the number of fish remaining in the sea, you will not receive any fish for this year. After all orders have been processed and your boat has returned, the population of fish in the sea regenerates according to the graph [draw the graph on the board or use the presentation]."
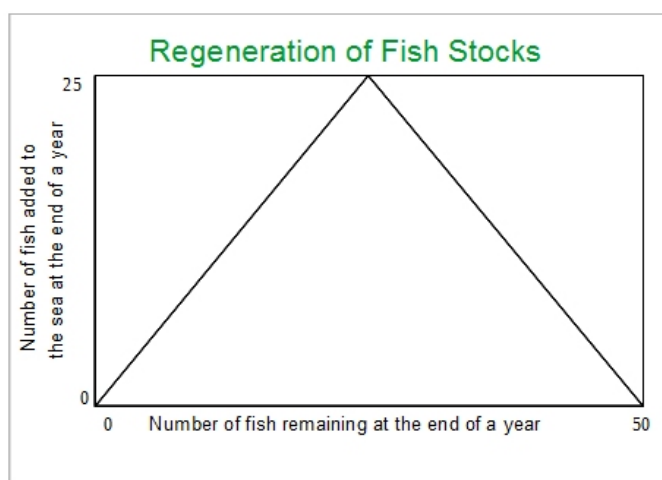
The graph shows that if no fish are left in the sea after all fishing orders have been processed, there will be no new fish. If 25 fish are left in the sea, 25 new fish will be added in order to reach the sea's total capacity of 50 fish. If 38 fish are left, 12 new fish will be added, etc.

Step 3 / Explain the procedure:

1. Each team decides on a strategy.

2. For each round, decide how many fish you want to catch this year.

3. Write the number on the index card and put it in your boat; pass the boat to the game host.

4. Requests are processed in a random order.

5. Take back your boat, take out your fish and start again at 1.

Give the teams a few minutes to discuss their long-term strategy and to file their first fishing order.

Step 4 / The host processes the orders:

Process the fishing requests in a random order. After all teams have handed you their cups, put them on a table and shuffle them with your eyes closed. Open your eyes and line them up for all participants to see. It is important to shuffle the cups to make sure you process the requests in a random order. Team No. 1 will not necessarily be the first team to have their order processed.

Step by step

(continued)

Take the index card from the boat that is at the far left. Do not reveal the volume of the order. If there are enough fish in the sea to match the order, take the respective number of coins from the tin and put them in the cup. Then process the next order. If the number of fish requested exceeds the number of fish remaining in the sea, put the index card back into the cup without adding any coins and turn to the next cup. Once all orders have been processed, return the boats to the respective teams.

Step 5 / Next order:

Ask the teams to decide on their next orders. While the teams are debating, count the coins in the tin and add coins according to the regeneration graph. It is quite simple: for any number of remaining fish between 25 and 50, add enough coins to get a total of 50; if there are fewer than 25 coins in the tin, double the number of remaining coins. For instance, if there are 12 fish left in the sea, add another 12 coins. Count the coins in the tin or consult your notes to add the adequate number of coins.

Step 6 / Game over:

Collect the boats for the second year and process the orders. Continue in the same manner. If the teams have been very quick to catch all fish, let them continue for another two rounds to let them experience the consequence of their mistake: no more fish! Then end the game. You may also end the game if the entire class has developed a strategy that keeps the population of fish at the point of maximum regeneration. In most cases, however, it will take at least 6 to 8 rounds for the participants to fully grasp the consequences of their decisions.

Step 7 / Wrap-up:

Usually, one or two teams will initially adopt an aggressive strategy by filing large orders. This causes a decrease in the fish population and restricts the number of fish available for all participants. In some cases, serious efforts will be made to coordinate decisions across all teams in order to achieve a satisfying yield that can be kept up over the entire duration of the game. Such efforts will usually fail, however, either because they are ignored by one or two teams or because they are based on an incorrect estimate of the maximum number of fish that can be caught each year.

The regeneration graph shows that the maximum number of new fish that can be added annually to the sea is 25. This also means that 25 is the maximum number of fish that can be caught sustainably each year. Over a course of 10 years, the teams could theoretically catch 250 fish without reducing the number of fish the sea can yield. If you divide this amount by the number of teams and multiply it by the assigned value per fish, the result is the maximum average gain per team. If any team fails to generate this amount, this is probably due to overfishing early in the game

Have each team list their gains on the flip-chart. Now discuss the results of the game in class.

- What has happened in this game?

- Who is responsible for the result? In fact, the overall structure of the game plays a greater role here than the strategies of individuals.

- What would have been the maximum average gain per team?

- What gains did the teams actually achieve?

- Who has won the game?

- Which strategy would guarantee the greatest possible yield for all teams? Why was this strategy not chosen?

- In real life, where do you see examples of the behaviour you could observe in this game?

- Which strategies would generate more sustainable results in real life?

Ask the participants to draw a graph that shows their fishing behaviour over the course of the entire game. Have students use the system of cause and effect (see presentation) to explain their results in the game. They may also use the system to develop a new strategy to regulate fishing volumes.

Source

Source   Lindner et al.: "Sustainability meets Entrepreneurship", IFTE (eds.), Vienna 2009

Closing deals with negotiating skills

Goals	The purpose of this game is to help students train their negotiating skills and capture the results of their negotiations in writing. The exercise offers an opportunity to discuss how agreements can be reached, to talk about various possible negotiating strategies and to explain the overall importance of agreements and of contracts (to record these agreements in writing).
Participants	6 or more participants (the exercise requires an even number of participants)
Time	50 to 90 minutes
Prepare	Select an item to serve as the object of the negotiations. (It could be anything, but it is best to choose an object that students can feel enthusiastic about, e.g. a city map with holographic representations of famous buildings.)
Step by step	**Step 1 / Form pairs:**

Step 1 / Form pairs:

The students form pairs with one person acting as buyer and one as seller. The main task is to reach an agreement within a given time span.

Step 2 / Briefing:

Lead all buyers out of the classroom and explain the rules to them. Encourage them to buy the object at the lowest price possible and set a limit. For instance, you could instruct them not to spend more than EUR 10.00 on the item. Point out that this information is confidential and send the buyers back into the classroom.

Now lead the sellers out of the classroom and explain the rules to them. Encourage them to sell the object at the highest price possible and set a limit, e.g. instructing them to sell the item for no less than EUR 5.00. Point out that this information is confidential and send the sellers back into the classroom.

Note: This strategy creates a conflict that will make the negotiations more interesting.

Step 3 / Negotiations:

Instruct the students to start their negotiations. Be prepared for a higher-than-usual noise level in the room. Just before the time is up, ask the students to conclude their negotiations and count down the last few seconds.

Step by step

(continued)

Step 4 / Analysis:

Write down the results of the negotiations on the board, listing them by prices (starting with EUR 5.00). Also note the volumes and any conditions that the students have agreed upon.

Now analyse the results in class. If prices exceed or fall short of the limits you have established, point out that these results are not ideal.

Also discuss what it means for the buyer or seller if the agreed price is above or below the limit. Sellers who sell the product at a price that is too low, for instance, will generate losses and their business will not be able to survive in the long term.

Encourage further discussion by asking the students whether they would want to do business with their partners again. Why/why not?

Step 5 / Contract:

The students should now record their agreements in a written contract. The contract should contain the date, the object of negotiation, the agreed price and the signatures of the buyer and the seller. Finally, the contracts are exchanged and each team checks the contract of another team to see if it is complete.

Author

Johannes Lindner

Design: Building a bridge

Goals	The students will learn to develop creative strategies as a team. This exercise enhances their team spirit, communication skills and creativity. The participants must complete a clearly defined task within narrow parameters, in order to get a better understanding of the limits of their own professional competence. The exercise shows that the ability to work in a team is something that needs to be practised.
Participants	At least 2 teams with 5 or 6 members each
Time	50 to 90 minutes
Prepare	•3 pieces of cardboard
	•15 sheets of paper
	•1 ruler
	•1 glue stick
	•1 pair of scissors per team
	•Copies of reflection sheets (see below)
	•Post-it notes

Step by step

Step 1 / Task description:

Form teams and instruct two teams each to build one bridge together. Each team builds one half of the bridge that should fit the half built by the second team. Time: 30 minutes. Only the material provided may be used to build the bridge. The teams can freely choose the design, shape and size of the bridge, as long as they meet the following criteria:

⇒The two halves of the bridge must fit together, forming one bridge that the two teams can present together.

⇒The bridge must be strong enough to support at least 0.1 kg (e.g. a flip-chart pen).

⇒Each team nominates a spokesperson that will be the only channel of communication with the other team. The designated spokespeople are the only ones who may discuss the design, dimensions, etc. of the bridge parts. These negotiations must take place orally and in a neutral location.

⇒The spokespeople may not hold more than 2 or 3 meetings during the construction phase.

⇒The co-operating teams must work in separate rooms and must not be able to see each other (or communicate indirectly).

Step by step

Step 2 / Presentation:

The two teams will present their product jointly. Discuss the bridge, its quality, timely delivery and methodical approach, as well as the working atmosphere in the teams. The game host should also conduct a load test to assess the quality of the bridge. General assessment criteria include: creativity, functional design, diligent execution and stability.

Step 3 / Reflection:

Each team is given a reflection sheet and post-it notes. Each team member answers the questions on post-it notes and attaches them to the reflection sheet to generate a team survey.

Step 4 / Wrap-up:

Copy the results of the individual teams on a flip-chart and discuss them in class.

Reflection sheet, 1 per team:

——

Please answer the following questions individually and write down your answers on post-it notes.

You will be given 5 minutes and 4 post-it notes per team member.

Attach the answers to the respective questions on the reflection sheet and discuss the results. Compare your results with that of the other team.

1. Which adjectives would you use to describe the co-operation within the group?

2. How would you describe the communication in the group?

3. Which factors have had a positive/negative influence on how you have completed your task? Suggest improvements!

4. According to you, who took the lead in the group?

A ball of yarn:

Analyzing work relationships
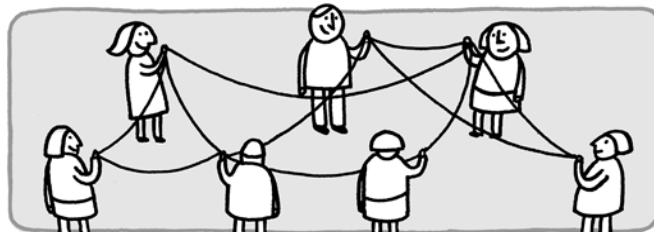
Goals	A ball of yarn can be used to reveal and represent the network of relationships between individuals in a group. There are two ways to use this exercise:

⇒ to represent a network of business and trade relations between representatives of training companies;

⇒ to create a socio-gram of the social and emotional relationships that form the group structure of a team or class. The informal structures of a group can influence the performance of students and work colleagues. A socio-gram can be a good starting point for measures intended to improve the atmosphere in a working environment.

Participants 15 to 30 participants

Time 15 to 20 minutes

Prepare ●A ball of thick, smooth yarn

●An large open space in the classroom

Step by step **Step 1 / Circle:**

The students stand in a circle. The teacher wraps the end of the yarn around his/her finger and throws the ball to a student, while citing an activity in which they collaborate (version 1) or making a positive statement about a group member (version 2), e.g.: "It is a good thing X is in our group, because …".

The student then wraps the yarn around his/her finger and throws the ball to another group member, continuing in the same manner.

Step 2 / Reflection:

When the yarn has been fully unwound or when there are no more statements to be made, the density of the network (which expresses the trade relations or the structure of relationships within the group) is analysed. The teacher should emphasise the strength of the network and explain how it connects the entire group, irrespective of its density.

Author Johannes Lindner

Networking

Goals	The students can rehearse how to deal with situations in which they might know only a few people. They learn to make new acquaintances, business contacts and friendships by beginning conversations with each other, handing out business cards and asking strategic questions. This exercise enhances the participants' confidence and self-esteem.
Participants	At least 8 participants
Time	30 to 50 minutes
Prepare	●Business cards ●Refreshments (optional) ●Name tags (optional)
Step by step	Encourage the students to train their networking skills in various situations: ●in class, among each other ●when talking to other teachers ●when talking to business people who are visiting school events.
Suggestions	●Providing refreshments and inviting guests will make the exercise even more fun and more realistic. ●Ask the students to dress appropriately. ●This exercise is an excellent opportunity to teach students various networking techniques, such as: holding your hot or cold drink in your left hand (so that your right is free to shake hands); wearing a name tag on the right side of your chest (so other people know who they are talking to); making little notes about the person you have just met on the back of their business card (so you will remember them better), etc.
Author	Johannes Lindner

Taboo

Goals

This educational game can be used as a playful way to practise the use of business terms. The students will train their ability to define a term as quickly and precisely as possible. The activity encourages a creative use of business terms and is an exercise in teamwork.

Participants

Up to 30 participants (in two teams)

Time

50 minutes

Prepare

• Copy cards twice (see below)

• Draw a table to keep score on the board.

• Bring a stopwatch.

Step by step

Step 1 / Form teams and explain the rules:

Divide the class into two teams. A member of one team draws a card and explains the term to his/her own team, being careful not to use the three words listed as "taboo". If the team guesses the term correctly, it scores a point, if it doesn't, the other team scores. A game host will make sure that the rules are not violated. There is a time limit of one minute for each term. If words that are taboo are used in the explanation, the other team scores a point (to monitor this the host will need a copy of the card).

Step 2 / Playing:

Team A chooses a member of team B to draw a card and have a brief look at it. Now he/she must explain the term on the card to his/her team (B) without using any of the words that are taboo. Team B must try to guess the term within one minute. For each correct answer, the team scores one point. Next, team B selects a member of team A to draw a card and explain the term to his/her team (A). Continue in this manner.

Cost absorption SAMPLE delivery conditions place of fulfilment clause	**Offer** tender request sales contract
Cost absorption delivery conditions place of fulfilment clause	**Carrier** forwarder deliver transport
Label sign branding advertising	**Tare** weight packaging gross
Discount price reduction payment period rebate	**Acceptance delay** delivery buyer deposit
Consumer protection Distance Selling Act door-to-door selling consumers	**Invoice** bill delivery payment terms
Recycling garbage/rubbish glass plastics	**Door-to-door selling** promotional trip withdrawal Consumer Protection Act
Bank statement payment bank receipts	**Product liability** producer damage defect
Market economy system property economy	**Trade union** represent employee labourer
Market practices sales contract entrepreneur usage	**Legal competence** responsible buy age
Value-added tax invoice price percent	**Credit purchase** purchase loan pay

Investigating: The colored pencil
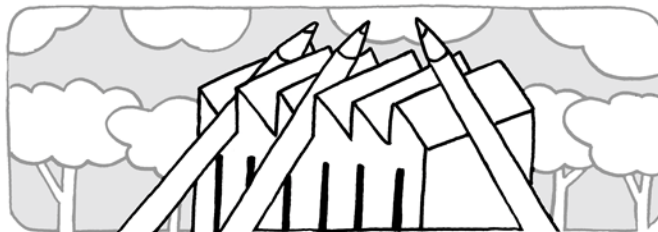
Goals	By investigating an object of everyday life, the students will use a discovering approach to internalise basic economic principles. They will analyse the resources and factors required for production (land, labour, capital, entrepreneurship, know-how) and discover the meaning of the terms company, production and profit.
Participants	Up to 30 participants
Time	30 minutes
Prepare	Coloured pencils, magazines & newspapers, packing paper, poster paper or flip-chart paper for the collage, glue, scissors

Step by step

Step 1 / Individual work:

Show a new coloured pencil to the class. Instruct the students to list the various components of the pencil on a piece of paper and to guess how the pencil was produced.

Step 2 / Discussion in class:

Together with the class, list the individual parts of the coloured pencil on the board (this list should include: wood, colour, core, label, design of the pencil, production knowledge).

Suggestions for the discussion

Explain to the class that each of these components is a resource or a production factor. Define "resource" as something that can be utilised to fulfil human needs and wishes. Point out that resources can be grouped in various categories: land, labour and capital (classic production factors), as well as entrepreneurship and know-how (modern production factors).

Explain the classic production factors to the class. These factors include natural resources, or gifts of nature, such as oceans, birds, trees, the sky, wildlife, etc. Ask the students to which category of resources these examples belong (answer: nature / land).

Now present the next category, which refers to human efforts to generate products or offer services. Examples include ballet, ball games, teaching and managing. Again, ask the students to guess whether these examples belong to the categories of land, labour or capital (answer: labour).

Next, define capital as something man-made that is used to produce other things, e.g.: bulldozers, robots, steel, computers, coloured pencils and school desks. Money is also considered capital – financial capital.

Also discuss entrepreneurship as the basis of ideas and their execution, e.g. the idea to produce a coloured pencil. Know-how is the practical application of information that is required to produce the coloured pencil.

Step by step

(continued)

Ask the class why a company might decide to produce coloured pencils. A possible answer is that people need affordable writing utensils, so the company produces coloured pencils to make a profit, but also to help people.

Ask the class how the pencil was produced. How many students believe that the pencil was made by people? How many students believe that capital goods, such as machines, were used? Answer: The factors capital, labour and land were all used in the production process. Entrepreneurship and know-how are required as well.

Step 3 / Wrap-up, collage:

The students should be able to define the following terms and give examples: resources, land, labour, capital, entrepreneurship, know-how, profit, production, company.

Ask the students to browse magazines and cut out images that to them represent these terms. They should then label the images with the corresponding terms.

Inspired by

Academy for Economic Education

Trading Game

Goals	Through this activity about successful business thinking, students should deepen their understanding of the following:

●Resources are unevenly distributed (especially when starting up a business), thus not everyone can equally engage in trade.

●Those with minimal resources can still engage in trade, so that there is a win-win situation for both sides and a feeling of satisfaction.

●Some businesses might experience an embargo based on the country they reside in and/or the industry they work in.

●Reflection on realistic daily situations is required to find solutions and is a way of applying theory to actual practice.

Participants   Up to 30 participants

Time   50 minutes

Prepare   ⇒Prepare a Bag of Goodies with three items in a paper bag for each student. Label each bag with the letters A, B, C, or NO in different group sizes. Each bag must contain three items; however, the individual items in each bag should vary. The value of the total items in each bag should also contrast each other. The contrasting values in each bag symbolise how start-up companies begin with different resources available. Goodies can be anything from chocolate, erasers, sponges, pens, and also items that could be split apart and distributed among a few bags (e.g. A Giraffe toy that is built in three pieces – place a piece of the Giraffe in each bag and see what value the Giraffe has to students in order to trade until they get all three pieces and the complete Giraffe).

⇒A rubric is provided to measure students' level of satisfaction during the game and will serve as an important piece for a wrap-up discussion.

⇒First study the example rubric to understand how to use it (Appendix A)

⇒Project the actual rubric (Appendix B) on a screen and fill it out as the students complete the game. The results of the rubric will be used for discussion at the end.

⇒Tell students the rules. A) They are not allowed to trade for free (trade nothing for something), and B) They are not allowed to steal.

Step by step   **Step 1 / Look inside the Bag of Goodies „Round 1":**

●Show a Each student receives their Bag of Goodies and is allowed to look inside, but is not allowed to show the other students what is inside. To model to the class, you should reveal what you have in your bag. As you pull out each item, demonstrate your satisfaction with each item and why the item is or is not valuable to you (e.g. You pull out a pen and show your satisfaction because teachers always need new pens – high value. You pull out a box of Gummy bears and frown because you don't really eat sweets-less value.)

●Instructions to rubric (Appendix B), ask students in the room to look inside their bags and not reveal the contents to anyone. Begin by stating, Trading day one, the market is open. Ask them to rate their current satisfaction based on what they have. Write results in rubric. Remind them that the items symbolise the resources they have as a start-up company.

Step by step

(continued)

Step 2 / The market is open to look „Round 2":

Begin by stating, Trading day two, the market is open. Ask students take the items out of the bag and place the items on the desk in front of them. Then ask students to get up and walk around to see what their peers have. Finally, call on the students to return all items to their bags and listen for the next step.

Instructions to rubric (Appendix B): Ask students in the room to rate their current satisfaction. Write results in rubric.

Step 3 / The market is open to trade „Round 3":

Begin by stating, Trading day three, the market is open. Students that have an A on their bag are allowed to trade only with students that also have an A written on their bag. They are allowed to trade and exchange the items with each other. The same rule applies to those students with bags labelled with B and C. The students with NO written on their bags are not allowed to trade and can only observe the others. (Students should not know that this symbolises embargo – they will learn this later.) Finally, call on the students to finish trading and return to their seats.

Instructions to rubric (Appendix B): Ask students in the room to rate their current satisfaction. Write results in rubric.

Step 4 / The market is open for all „Round 4":

Begin by stating, Trading day four, the market is open. All students are allowed to trade with each other. Finally, call on the students to finish trading and return to their seats.

Instructions to rubric (Appendix B): ask students in the room to rate their current satisfaction. Write results in rubric.

Step 5 / Wrap-up

Students will reflect on their level of satisfaction during each round and how it may or may not have changed as the activity progressed through each round. Analyse the possible causes for their changes in satisfaction. All these group responses should be written on the board and discussed.

Also ask students how they came to an agreement with each other. Also possibly ask a couple students to explain their process or strategy for trading. Did they feel like every deal was fair? Why or why not? Were they always able to come to a win-win situation? Explain to students what happened during round 3 and why the "NO" students were not allowed to trade. Tell the class that this symbolised an embargo and that not all countries have the same rights to trade all goods in all industries.

Have students reflect and discuss whether or not this is fair? Do they know of any examples of embargo? How did you cope with resources not being evenly distributed for your start-up company? Reveal the total scores of each round and game. Walk through each round and discuss with students as to why the level of satisfaction rose or fell. Ask them to identify which elements contributed to an increase in satisfaction and which elements contributed to a decrease in satisfaction. Also ask, why some items had more value and others did not. What factors determined the value of the items? The rubric serves as an excellent platform for meaningful discussion surrounding trade within a start-up company!

Step 6 / Extension:

As a whole group, develop a mind map with the central bubble or circle stating, Successful Business Thinking.

Sources

Lindner, J./Fröhlich, H.: Wirtschaft gestalten II, Vienna 2015

Appendix A

Look at this sample to understand how the rubric works.

1.After each round, ask students to raise their hands for each level of satisfaction. Count the number of hands and place in the box the # of students.

2.Repeat this process from the satisfaction level 5 until level 1.

3.Go back and take the number of students and multiply the number by the level. Ex. In level 5 - 2 total students x 5 (level) = 10

Level of Satisfaction	1. Round		2. Round		3. Round			4. Round		
	All self-assess (Without Trading)		All self-assess (After looking in their bags and without trading)		Only A, B, C Self-assess		Only NO Self-assess	Totals of (Round 1) + (Round 2)	Self-assess (All can trade and with each other)	
	# of	Total	# of	Total	# of	Total	Total	Total	# of	Total
5 ☺☺☺☺☺	2	10								
4 ☺☺☺☺	4	16								
3 ☺☺☺	10	30								
2 ☺☺	5	10								
1 ☺	3	3								
Total		69								

Legend: 5 = Extremely Satisfied   4 = Very Satisfied   3 = Satisfied   2 = Somewhat Satisfied   1 = Not very Satisfied

Appendix B

Group Rubric for discussion on the Trading Game

Level of Satisfaction	1. Round — All self-assess (Without Trading)		2. Round — All self-assess (After looking in their bags and with-) / Only A, B, C Self-assess		3. Round — Only NO Self-assess / Totals of (Round 1) + (Round 2)		4. Round — Self-assess (All can trade and with each other)	
	# of	Total	# of	Total	# of	Total	# of	Total
5 ☺☺☺☺☺	2	10						
4 ☺☺☺☺	4	16						
3 ☺☺☺	10	30						
2 ☺☺	5	10						
1 ☺	3	3						
Total		69						

Legend: 5 = Extremely Satisfied   4 = Very Satisfied   3 = Satisfied   2 = Somewhat Satisfied   1 = Not very Satisfied

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3

USE OF IT IN TEACHING

Chapter Overview

CREATING/DEVELOPING A BUSINESS IDEA

What is a brilliant business idea?

Example: IKEA

" At IKEA our vision is to create a better every-day life for the many people. Our business idea supports this vision by offering a wide range of well-designed, functional home furnishing products at prices so low that as many people as possible will be able to afford them **Asic business theory**

Basic aspects:

1.The four basic W's:

    a)Who is the customer?

    b)Which need are we trying to meet?

    c)Which product are we offering?

    d)Why should someone buy this product

2.Functions: Leading star, leading concept, communication core for stakeholders, reflection basis,

3.Criterias for a good business idea (Clair, easy to understand, feasible, attractive/promising/may generate much money)

The process of developing business idea

1.Gather some interested people to start a creative process.

2.Find possible business ideas

    Themes and sources

    ⇒Arena. Which main market: consumers, business, institutions, geographical area

    ⇒From own experience (discovered on a trip, sudden idea)

    ⇒Unsatisfied needs

    ⇒Attractive branches of industries

    ⇒Already developed business ideas (link1, link2)

    ⇒Copy a successful business idea from elsewhere

    ⇒New knowledge and new technology

    ⇒New laws, rules, regulations

    ⇒New markets, trends, price jumps

    ⇒Natural resources

    ⇒Social entrepreneurship (human needs)

    ⇒Methods for creative processes (pick from Zorans part of this paper)

    ⇒Screen your possible alternative business ideas

and throw the useless ones

    ⇒Evaluate closer, choose one business idea and give it a good description. (hint: clarity, feasibility, attractiveness/how promising)

Application

Group assessment 1

Are these three examples well defines business ideas?

*SAS: Makes your travel easier

*Google: To organize the world's information and make it universally accessible and useful .

*BBC: To enrich people's lives with programmes and services that inform, educate and entertain.

Consider and conclude.

Group assessment 2

Use the process model above in creating business ideas

from four alternative sources

Items of evaluation:

⇒Good business idea?

⇒Good process (school)

⇒Good learning description (What have you learnt from working with this task?) (school)

Use of ICT

⇒Programs/applications: wordprocessor (Word), spreadsheet (Excel), presentation program (PowerPoint), internet browser (Internet explorer), painting program (MS Paint).

⇒English Internet resources: www.tesguide.eu, ja-ye Europe, Ja-ye Company of the year 2014

⇒Norwegian Internet resources: The cooperation platform of UE.

How to communicate efficiently with your customers?

This document follows a structure consisting of:

⇒An assessment (individual or group)

⇒Teacher`s guide

⇒Links and resources for inspiration and information

SOCIAL MEDIA

Social media are internet services that let you interact with others, and share and create content through online communities. You can use social media to market your business.

Social media present great marketing opportunities for businesses of all sizes.

Group-assessment:

Work together in small groups. Think of five reasons or advantages by using social media to promote your business and communicate with customers. Write down the groups answers.

Teachers guide:

Yours students should conclude with some of these advantages:

You can use social media to:

⇒promote the name of your brand and business

⇒tell customers about your goods and services

⇒find out what customers think of your business

⇒attract new customers

⇒build stronger relationships with existing customers

Links and resources:

Explore online marketing here.

Facebook

Group-assessment:

How can you use FB to achieve your goals? Find five practical ways of recruiting, engaging and create activity among customers and users of your own Facebook page.

Teachers guide:

Find new customers and increase sales. Facebook can help you meet your business goals. Facebook marketing must achieve the goals you have set out in your marketing strategy and plan.

Links and resources:

The student should conclude or find some of these: the 25 Facebook marketing tips regarding how to increase your sales.

Create activity and likes

Group-assessment:

Find and agree upon three company-pages on Facebook that you think promotes and communicates well. Justify your group's opinion.

Teachers guide:

http://www.inc.com/ss/20-best-company-facebook-pages

Create your page

Group, or individual assessment:

Create your company`s Facebook profile by using your company`s logo and identity.

Teachers guide/links:

http://blog.hubspot.com/blog/tabid/6307/bid/5492/How-to-Create-a-Facebook-Business-Page-in-5-Simple-Steps-With-Video.aspx

http://www.socialmediaexaminer.com/how-to-set-up-a-facebook-page-for-business/

http://www.pagemodo.com/

HOW TO COMMUNICATE YOUR IDENTITY?

This document follows a structure consisting of:

1. An assessment (individual or group)
2. Teacher`s guide
3. Links and resources for inspiration and information

What should your logo communicate?

It does not matter if you are working with a top design firm or going at it alone with dusty copy of Photoshop, creating a logo can be a challenging process for anyone. This is especially true if you are designing for your own startup — it is difficult enough to run a company, let alone break its entire identity down to a single logo.

Assessment (group or individual):

Why is a logo important for a company? Think of at least five good reasons to create your own company's logo.

Teachers guide:

Students should answer something like this: Your logo is a visual representation of everything your company stands for. Think of McDonald's golden arches or the Nike swoosh-these two impressive logos embody these companies well. However, any companies still skimp on developing this key identity piece.

Links and resources:

Ideally, your company logo enhances potential customers and partners' crucial first impression of your business. A good logo can build loyalty between your business and your customers, establish a brand identity, and provide the professional look of an established enterprise.

With a little thought and creativity, your logo can quickly and graphically express many positive attributes of your business, too. (http://www.entrepreneur.com/).

Every company needs a logo design, and you will want an attractive one if you are interested in luring in customers. Here you can find seven important things to think about before creating a logo for your startup: http://thenextweb.com/dd/2013/06/21/7-things-to-think-about-before-creating-a-logo-for-your-startup/

Logo design

Assessment:

Recognize the logos – a fun quiz for the students.

Assessment:

What do you think describes a good logo? Think of five adjectives that describes a good logo. Find three examples of good logo that matches your adjectives.

Teachers guide/link:

http://www.ranker.com/crowdranked-list/ranking-the-best-logos-in-the-world?source=share

Assessments:

This is a case study for your inspiration: Redesign of an existing logo – "The little Animal Park" ("Den lille dyrehage" in Norwegian). This is the two first questions in a multiple-choice assessment. (Not yet finished).

Original logo:

Figure 1-3: Original logo "Den lille dyrehage"
Source: http://www.madebytinta.com/Den-Lille-Dyrehage-Branding

By looking at this logo, what do you think "The little Animal Park" is?

- A restaurant
- A toy store
- A Zoo (correct answer)
- A boutique

What does this logo communicate to you?

"The little Animal Park" is a place where children gets close to the animals and can explore wild and domestic animals in their own habitat.