



1-1 Communication – Presentation

Activity: “PRESENTATION(S)”

Main used to measure	Cl. 1: subcompet. Presentation

Additional used to measure	Cl. 4: subcompet. Creative thinking
	Cl. 5: subcompet. Stress resilience
Group setting	individually
Time required	App. 30 min. (in case of a group of 8 persons; 5 min. for the preparation, 8 persons; 3 min.)
Aids	blank sheets for participants to prepare

ACTIVITY DESCRIPTION

This is a purely individual activity, which first requires a relatively short preparation of about 10 minutes, followed by an individual presentation of the assigned topic.

Alternatively, a standard introduction presentation of self can be given.

Taking into account the overall time requirements, the demands on the attention of others and the dynamics of the AC/DC as a whole, the activity can be divided into 2-4 parts of 15-30 min. after all participants have prepared, with a smaller part of all participants making their presentations. Presentations can take place at any time during the AC/DC program. Alternatively, it is also possible to split into 2 parallel groups, each of which will be observed by a minimum of 2 evaluators.

Depending on time availability, questions from other participants (audience) may be allowed.

The activity provides material for the assessment of the subcompetence Presentation in cluster 1: Communication, as well as the subcompetence Creative Thinking in cluster 4: Creativity and Innovation and the subcompetence Stress Resilience in cluster 5.

INSTRUCTIONS

The participants are given the assignment. Emphasis is placed on understanding that each person will prepare their own 3 min. presentation on one of the possible topics. At the same time, the preparation time is communicated, which is 5-10 min. and starts for all participants at the same time and immediately.

The mechanism for delivery will also be explained (all participants in turn, or in groups of 3-4 during the whole AC/DC, or in two parallel groups immediately after preparation, etc.).

Step 0 (10 min.):

Start time for preparation. Everyone is preparing individually. They have blank sheets of paper available if necessary.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Step 1 or more steps (always 3+1 min. per participant):

For the selection of the first participant (in each individual group), one can use e.g. the alphabetical order (from the beginning, from the end) or the principle "Who is the oldest (meaning who was born as early as possible in January in any year)?" or adequately "...the youngest..." or any other method.

Individual presentations.

In the case of in site AC/DC, the participant will stand in front of others so that everyone can see him/her.

At the end of each individual presentation, there may be a question from the other participants or the evaluator.

Evaluators monitor individual parameters (criteria, speeches), one of them also measures presentation time.

Notes and other suggestions/options:

(applies more to a Development-Centre) The activity can include self-evaluation by the presenter (keeping time, gaining the attention of the audience, keeping the attention of the audience, arousing interest in the subject of the presentation, ..., what went well during the presentation, what went wrong and why, what the presenter would do differently if a similar presentation were repeated, ...), as well as similarly oriented evaluation by the evaluators and the audience.

EVALUATION

The evaluators focus on the following parameters: self-presentation and presentation of the chosen topic, mastery of the individual components of communication, establishing contact with the audience and gaining their interest. Secondary assessments include the ability to meet the time limit for the presentation (time management), the degree of creativity and incorporation of creative elements into the presentation, and stress resilience in the form of controlling self and own emotions.

We assess each sub-competency separately according to the following indicators:

(primary) Cluster 1: Communication; subcompet. Presentation

- Quality of the content of the message (amount of information presented and its clarity, structure and logic of the message)
- Verbal communication (choice of the 'language' of the message, sentence structure, vocal quality, quality of the actual speech)
- Non-verbal communication (quality and appropriateness of the non-verbal component; gestures, haptics, facial expressions, ...)
- Use of/compliance with time limits (use of time limits, compliance with time limits)
- Degree of interaction with the audience (integration of interaction elements and their success)
- Attractiveness, gaining interest of the audience (gaining and maintaining attention, gaining interest in the subject of the presentation)



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



(secondary) Cluster 4: Creativity and Innovation; subcompet. Creative thinking

- Degree of integration of creative elements into the presentation (effective and efficient integration of creative elements to fulfill the purpose of the presentation)

(secondary) Cluster 5: Interpersonal Skills; subcompet. Stress resilience

- Controlling self, and own emotions (managing the natural stress related to the performance, eliminating expressions detrimental to the quality of the presentation, etc.)

INSTRUCTIONS (participant/participants):

Prepare and then make a presentation of no more than 3 minutes (*choose one of the options*):

- a) Present yourself so that everybody will remember you, in which you are unique, attract the audience
- b) Your favourite holiday destination
- c) Your favourite book
- d) Your favourite film
- e) ... *other alternatives may be added, or the choice may be reduced or changed ...*

The aim is to gain the attention of the audience, to arouse their interest and ideally to "make" them decide to also visit the presented destination / read the presented book / watch the presented film etc.

The presentation will be "live", there are no special resources available to support the presentation, you have to make do with what you currently have available.

If the self-presentation contents are not interesting enough, the observers can ask each participant to share e.g. their strangest hobby.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

1-2 Communication – Listening and understanding

Activity: “Holiday”

Main used to measure	Cl. 1: sub-competence Listening and understanding

Additional used to measure	Efficient communication
	—
Group setting	Individually
Time required	App. 15 min.
Aids	Work sheet for each participant, text to be read by the moderator or played from a recorder

ACTIVITY DESCRIPTION

The lecturer plays an audio recording or reads the text below to the participants.

He/she gives the participants 10 statements with the task to decide which one is true, which one is false and which one cannot be decided.

After they have handed in their answers, he/she will evaluate their results with them and give reasons for the correct answers.

INSTRUCTIONS

The following text is read or played to the participants:

Martin shares his troubles concerning this year's holiday with his colleague Peter. He and his wife planned a slightly longer vacation this summer than usual. To be able to make it, two prerequisites must be met:

- He himself must get approval of 1 additional week of unpaid leave by his boss
- He and his wife must get time off from work at the same time.

His wife works as a head cashier in a supermarket. Therefore, it will probably not be possible for her to get unpaid leave during the summer. But to get regular holiday should be probably realistic.

Martin's boss Mr. Beck rejected his request. But Martin is not ready to give up. In all his years with the company he has never asked for any significant benefit or relief.

During the conversation with Peter, Martin is invited to visit Mr. Beck.

At the same time, Peter notices the travel agency's catalogue on Martin's desk. A resort in South America is circled there.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INSTRUCTIONS for participants

Here are some statements about the story you heard. Decide which ones are true. In the table below, write Y, N or ? for each one.

Y = Yes, the statement is true: The statement matches the content of the story.

N = No, not true: The statement does not match the content of the story.

? = Cannot decide: the information was not available in the story.

Assertions:

1. Peter asked his colleague about his holiday plans.
2. Martin plans to take an extended vacation with his wife this year.
3. His wife works as a teamleader in a supermarket.
4. His wife certainly won't get a holiday this summer.
5. They are interested in South America.
6. Martin wrote a request for one week's unpaid leave.
7. His supervisor rejected his request for unpaid leave.
8. Martin intends to appeal to higher superiors.
9. Martin hasn't been working for the company for very long.
10. Shortly after the conversation with Peter, Martin's supervisor Mr. Beck called Martin in to see him about the matter.

1	2	3	4	5	6	7	8	9	10



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EVALUATION

The number of correct answers is measured. We expect an average of 7.

Correct answers:

1. ? It was not said how the conversation started, whether Peter asked him or Martin talked alone.
2. Y He and his wife were planning an extended vacation this year.
3. Y The wife works as a supermarket head cashier, i.e. as a teamleader.
4. N The text said that she would definitely not get unpaid leave in the summer, but asking for a regular holiday would probably work.
5. ? Martin says nothing about this. This is an assumption based on the travel agent's brochure which was lying open on his desk.
6. ? It was not said whether this request was made orally or in writing.
7. Y Martin's supervisor, Mr. Beck, denied his request for unpaid leave.
8. ? Martin didn't talk about higher superiors. He's just prepared not to give up.
9. N Martin claims the opposite "...for years..."
10. ? It is true that Martin was asked to visit his superior, Mr. Beck. However, it is not clear whether this is on this matter (i.e. on the subject of a holiday leave).



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

2-1a Teamwork - Effective communication skills

Activity “Dealership”

Main used to measure	Effective communication skills
	Resolving conflicts
	Collaborating effectively
Additional used to measure	Decision-making skills, Flexibility and adaptability, Problem solving
Group setting	Pairs, group
Time required	App. 60 min.
Aids	Sheet with assignment for participants (one sheet for each participant)

DESCRIPTION OF ACTIVITY

This is a group activity. Participants first solve the case study in pairs starting with solving in pairs and then forming larger groups. The task is always the same for groups of all sizes - to rank the characters in the story from the most honest to the most vicious one.

The activity provides material for the assessment of all 3 sub-competencies of Teamwork, i.e. Effective Communication Skills, Conflict Resolution, Effective Cooperation - further methodologically elaborated below in the activity assessment and in the competency assessment table.

INSTRUCTIONS

Distribute the printed assignment below to the participants. Always set the time frame available to the participants in each step. The times are approximate and can be adjusted as needed.

Step 0 (7 min.):

If the total number of participants is less than 7, the activity starts as individual work and the participants pair up only in step 1. Participants individually determine the order of the characters according to the story assignment.

Step 1 (10 min.):

Participants will be divided into pairs (if there is an odd number, there can be one trio). The pairs create a mutually acceptable order of the characters of the story according to the assignment (if step 0 precedes, the participants come to the pair with "their" individual order). If there was no Step 0, it will take 10-15 minutes to create the first order, as the participants are also reading the story for the first time. Participants are encouraged to discuss the criteria and their individual perspectives on the characters. As the work progresses, the evaluators circulate around the pairs and observe the group work and the behaviour of the participants.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Intermediate step (10 min.):

On the board, we write the created rankings (from most honest to most evil) of all groups. We ask the following questions:

- How did you proceed?
- How did you specifically contribute to the solution?
- How satisfied are you with the final solution?

After that, combine two pairs together to form foursomes (for an odd number of pairs, adjust, but do not split the pairs from step 1 anymore). Pairs with different orders need to be grouped together.

Step 2 (10 min.):

The task of the newly formed groups is to create a collective sequence of characters in the story according to the assignment. Participants are encouraged to discuss the criteria and individual perspectives on the characters. In the course of the work, the evaluators go around the pairs and observe the group work and the behaviour of the participants.

Intermediate step (10 min.):

Write the new rankings of all the groups on the board. Ask the following questions:

- How did you proceed?
- How did you work with your original rankings?
- Were there any conflicts?
- How did you specifically contribute to the solution?
- How satisfied are you with the final solution?

Now we join all the participants in one big group.

Step 3 (10 min.):

The task of the whole group is to create one common ranking. We observe the behaviour of each participant, their attitudes and involvement.

Final reflection (10 min.):

Write the final order on the board. Ask the following questions:

- How satisfied are you with the final solution?
- How did you proceed?
- How did you work with your original orders?
- Were there any conflicts?
- How did you specifically contribute to the solution?
- What criteria did you consider in making your decision?

EVALUATION

The evaluation focuses on the participant's ability to work as a team, and other necessarily demonstrated competency skills are evaluated secondarily.

We evaluate each sub-competence separately according to the following indicators:

(primary) Cluster 2: Teamwork; subcompet. Effective communication skills



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

- Active listening (Giving other persons space to express themselves, tendency to understand their ideas, avoiding immediate counter-arguments)
- Clarity of expression (The degree to which the message is clear and understandable)
- Non-verbal communication (Ability to complement verbal messages with gestures, facial expressions, eye movements, postures and other non-verbal signals to communicate)
- Ability to agree (Ability to find a common output with others or reach a consensus)

(primary) Cluster 2: Teamwork; subcompet. Resolving conflicts

- Conflict identification (Ability to distinguish different conflict signals and understand their causes and impacts, responding to them in a timely manner.)
- Constructive resolution (Ability to adequately resolve conflict - negotiate and seek compromises, consensus and other possible solutions.)
- Controlling own emotions (Ability to regulate one's own emotions in difficult situations - ability to reflect, understand own emotions and their effect on behaviour in conflict, ability to express them adequately.)

(primary) Cluster 2: Teamwork; subcompet. Collaborating effectively

- Sharing goals with others (Interest in defining and achieving goals together in a group.)
- Taking a useful role (Ability to identify and effectively perform a needed role within a team environment based on knowledge of one's own abilities and skills.)
- Respect for others (Considering and respecting the needs and opinions of others in group work.)

(secondary) Cluster 3: Leadership; subcompet. Decision-making skills

- Ability to make decisions even on ambiguous assignments, to make decisions under time pressure.

(secondary) Cluster 4: Creativity and Innovation; subcompet. Flexibility and adaptability

- Adapt to a new solution and criteria in a new, larger group.

(secondary) Cluster 5: Interpersonal Skills; subcompet. Problem solving

- Ability to systematically solve assignments, e.g. by establishing appropriate criteria.



**Co-funded by
the European Union**

INSTRUCTIONS (participants):

Read the following story and rank the characters in the story from the most honest to the most "villainous".

What criterion or criteria did you use to determine the ranking of the characters?

The story:

Alex is a college student. Due to the financial situation of his parents, he has to earn his own money while studying. There would be nothing wrong with this if he did not do so by selling marijuana on the sly. However, he himself would never put marijuana in his mouth. In order to commute to school without any problems and at the same time to get his "goods", he had to get a car. So he went to the nearest car dealership, where he picked out a nice used Chevy.

The Škoda Octavia 1.9 TDI was sold to him personally by the owner of the car shop, Mr. **Ben**. He is an experienced practitioner who has been running a car dealership for many years. All he has to do is look at the car and he knows what condition it is in, what its life expectancy is and what price to set to make it optimal for all parties involved. He briefly drove the second-hand car, which he then sold to Alex, and it seemed to him to be absolutely faultless, so he did not bother to carry out a more thorough inspection, which he should always have done. If he had done so, as an experienced professional he would undoubtedly have found that the car had a fundamentally down-turned odometer, while he had not yet carried out the long-overdue replacement of the timing belt according to the service manual. This neglect of necessary maintenance (and it wasn't the only one) can do a lot of damage to a car, especially at high speeds.

The down-turning of the odometer was initiated by the original owner of the Octavia, Mrs. **Cecilia**. She is a mother of three children, her husband left her in her 40s with her best friend. She was left to raise her children (aged 10, 15 and 21) all alone. In addition, she has taken on a mortgage which she has to pay regularly. Since she had no money, she finally decided to solve her financial crisis by selling her used car. She knew that the car had not been serviced for several years, and she also knew how to ensure that the odometer showed one hundred and fifty thousand kilometres less than the actual mileage. What, specifically, had led her to sell the car?

The mortgage she was paying was initially fully under her control. The bank officer in charge was her primary school classmate, Mr. **David**. He knew about her family situation, yet he arranged the loan for her. Out of old acquaintance, he concealed from the bank that the separation from her husband had reduced Mrs Cecilia's creditworthiness. This means he broke the bank's internal rules. In addition, he was willing to cover the sums owed for a certain



Co-funded by
the European Union

period of time if she could not pay. He did so. Not once, but for five whole months. During a routine check, however, his "cover" was discovered, and he had to ask Cecilia to pay the money owed immediately, and within three days at the latest, before the due diligence would take place.

The task:

Rank all the characters from the most honest to the most villainous one.

What criterion or criteria have you used to rank the characters?



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

3-1a Leadership – Decision making

Activity: “CORPORATE TRANSFORMATION (case study)”

Main used to measure	Cl. 3: subcompet. Decision-making skills
	Cl. 3: subcompet. Strategic thinking
	Cl. 5: subcompet. Problem solving
Additional used to measure	Cl. 1: subcompet. Understanding
	Cl. 2: subcompet. Effective communication skills
	Cl. 3: subcompet. Empowering others

Group setting	in groups (3-5 participants)
Time required	App. 20 min. for teamwork, 10 min. to present the results (and possibly app. 15 min. to find a common solution)
Aids	---

ACTIVITY DESCRIPTION

This is a group activity focused on teamwork and on identifying managerial and analytical skills.

Participants solve the assignment in groups of 3-5 people, understanding the assignment is part of the actual group work. Each participant receives a copy of the assignment, the copies are always identical. All groups have identical assignment.

The assignment contains a lot of the necessary information, nevertheless, much of the possible additional relevant information is missing. The individual actors in the case study are not significantly polarised, and if they are, it is only by one particularly highlighted characteristic or trait, which is usually presented in an overly emotive way, but may not have any major impact on their own performance and/or their performance potential.

The evaluators do not provide any additional information on the assignment. In the end, when they present their solutions, the participants are allowed to state what additional information could further improve their proposed decisions.

The group work itself usually takes about 20 minutes, followed by a consecutive group presentations (about 10 minutes) in which the groups communicate and also briefly argue their solutions. Each group presents one solution, so they have to agree withing the group on one acceptable solution.

The work progress is monitored by the evaluators. A key element of an adequate solution is the choice of an appropriate method of selecting the individuals chosen to leave the company, as well as the method of selecting the new leader (selection criteria). The group dynamics, the initiative shown by the moderator of the group, the group leader, etc. are also monitored.

If time allows, all participants (i.e. all groups) can be invited to work together in a single large group to arrive at a single final solution (agree on a single group-wide solution). This phase is usually quite beneficial in terms of monitoring the manifestation of the competences under observation, especially



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

communication skills, analytical skills and especially leadership skills; the time required is usually about 15 min.

If time allows, all participants (i.e. all groups) can be invited to work together in a single large group to arrive at a single final solution (agree on a single group-wide solution). This phase is usually quite beneficial in terms of monitoring the manifestation of the competences under observation, especially communication skills, analytical skills and especially leadership skills; the time required is usually about 15 min.

The case study does not have a single correct solution, but rather there are more easily arguable solutions (typically V. Adams as a leader, the departure of R. Neubauer and F. Brown, or E. Smith) and inadequate (difficult to argue; e.g. the choice of M. Malik as a leader, the departure of V. Adams, etc.)

INSTRUCTIONS

Participants are divided into groups, in the e-version they are divided into more working sub-rooms, in the on-site version the groups are invited to disperse to the prepared sub-rooms etc. (groups should not interfere with each other). All participants in each group are given an assignment that requires no extra commentary (everyone has a completely identical assignment). The time for solving the problem is communicated (20 min.).

The evaluators observe the work in the groups (this is a key point, the opportunity to observe the competences shown, they take turns in observing the groups).

After the time has elapsed, the groups present their results in a voluntary, random or evaluator-selected order, including a brief argumentation of why they have decided the way they did (the argumentation can become repetitive quickly, so reference can be made to what has already been said by previous groups). It is particularly interesting to see whether the groups mention specific criteria(s) that were used to make their decision, or what viewpoints were taken into account during the decision making process.

Note.:

If time allows (about 15 min. is needed), the chief evaluator can briefly comment on the solutions and express "dissatisfaction" with them (no solution is ideal in this case, something "bad" can be found in each of the actors) + invite the participants to find a solution on which all groups, or all participants, would agree.

At this stage it is beneficial to observe the group dynamics in the large group, the manifestation of managerial competence of the participants who take the initiative and lead this difficult work. At the same time, it is beneficial to observe whether the large group will follow a systematic path of agreement on the criteria for the new leader and the candidates to leave, or whether it will rather "chatter" or "fight" for its original solution, etc.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EVALUATION

The evaluation focuses on the managerial competences of each participant, while other observable competences are evaluated secondarily, see below:

(primary) Cluster 3: Leadership; subcompet. Decision-making skills

- Being able to make own decisions
- The ability to take the initiative and (correctly) make decisions for a stalled group, while at the same time (not being afraid to) take responsibility for taking a step forward

(primary) Cluster 3: Leadership; subcompet. Strategic thinking

- Contextual reasoning, the ability to think about the situation in its entire context and in the given time frame
- Ability to consider and present different scenarios, options

(primary) Cluster 5: Interpersonal Skills; subcompet. Problem solving

- Propose specific solutions and argue them adequately
- Critically evaluate own and other participants' solutions
- Develop other people's ideas, etc.

(secondary) Cluster 1: Communication; subcompet. Understanding

- Ability to identify relevant facts from a written assignment

(secondary) Cluster 2: Teamwork; subcompet. Effective communication skills

- Ability to communicate effectively within a group, to contribute one's own opinion, to argue one's own point of view, to check understanding, to discuss effectively for the sake of a common desirable solution

(secondary) Cluster 3: Leadership; subcompet. Empowering others

- Ability to encourage, motivate others to work, challenge counter-arguments, actively encourage others to find a solution

INSTRUCTIONS (for participants):

Description of a situation:

As part of the organizational changes approved by the Board of Directors, two departments will be merged in your organization, Advertising (previously 5 employees) and Public Relations (previously 4 employees).

The head of the advertising department has been on long-term sick leave and was granted a full disability retirement just a few days ago. The previous head of Public Relations department terminated his employment, last week joined a multinational company and is now working abroad.

Of the remaining seven employees, one manager must be selected and, unfortunately, two must also be dismissed for redundancy. They cannot be offered employment in other departments. The merger of the two departments is expected to increase productivity and



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



reduce costs. However, there will be no major changes in the concept and the ratio of work carried out in-house and outside the company by external advertising and media agencies or graphic design studios will remain roughly the same.

You all have to agree on one decision.

So whom will you appoint as the new head and whom will you dismiss?

How will you justify your decision to all the staff in the merged department, especially those who will be laid off for redundancy?

How will you justify your decision to the CEO, who wants to be informed?

(if you lack any information, make a clear decision without it, but at the same time indicate which specific information would make your decision more informed)

Note: some of the persons are noted for speaking one or two major international languages. This means languages other than their native tongue. So if their native tongue would be English, we can imagine they speak either French, German or Spanish.

Personal data available on individual employees of the department:

Karl Pettigrew, 52 years old, employed by the company for 23 years, divorced, average and stable performance, ensures the execution of events and implementation of projects. He has never had any trouble, is very experienced ("old experienced wolf", someone else would say with humorous exaggeration "old structure") and can be relied upon, has a number of important contacts. However, in the last year he has been sick 3 times and missed 28 working days. He is a high school graduate, serves as deputy head of the public relations department, and is involved in the professional association of P.R. professionals. His gross salary is CZK 52 000 per month (cca. 2000 EUR)

Diana Button, BA, 31 years old, married with 2 children. She returned to her post after maternity leave, and within less than a year of her re-entry she was neither ill herself nor did she take stay at home to take care of her children. Even though she has graduated from a university, she has been "stuck" in the same job since graduation, performing a function that can be performed by a high school graduate. She manages her tasks with ease, but is certainly capable of more - or so her former supervisor thought. She speaks one major international language but doesn't have a driver's license. She's in charge of marketing executed through advertising agencies and graphic studios, and of liaising with them. She is the "sunshine" of the department, a promoter of well-being, she can get along with everyone, she has "a kind ear" for many people in the company, she can advise people and support them. Her gross salary is 38 000 CZK per month (cca 1500 EUR).



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Mike Malik, MSc., 27 years old, single and without commitments. He hasn't been sick once in the last year. He is in his second year with the company, this is his second job, he has developed several projects (mainly advertising scripts) which have been successfully implemented. He has a reputation as a very inventive and creative person who is able to come up with original yet effective projects. However, he is also a rebel and a bit of a bohème. He is a fountain of ideas. His weakness is meeting deadlines. Sometimes he problematizes what everyone has already agreed on. He has a strange sense of humour and is often misunderstood. He can manage things on his own. Because of his inventiveness, others can tolerate his behaviour. He speaks fluently one major international language. His gross salary is 45 000 CZK per month (1800 EUR).

Robert Neubauer, MA, 28 years old, married, has a three-year-old daughter, speaks English and German. He is a hard worker, many say he is unscrupulous. He is not popular with his colleagues, especially women. On the other hand, in the three years he has been employed by the company, he has proven his professionalism and has always completed his tasks on time. He seems to be popular with senior management. He is organisationally savvy and also acts as a spokesman. He has made no secret of the fact that if he does not move up the hierarchy, he will leave. He has an offer from a prestigious agency, but "only" for the position of an account manager (where you start "from scratch"). He can be harshly critical of others and their work. He respects Karl Pettigrew for his insight, but perhaps there is also a piece of gratitude for his introduction to the field, as Pettigrew was his mentor. His gross salary is CZK 55,000 a month (2200 EUR).

Ella Smith, 30 years old, married with a 6-year-old daughter. She is the sister-in-law of JUDr. George Smith, who is an editor in an economic periodical in which the company has a good publicity. She is in charge of the entire departmental agenda, obtaining and preparing documents, such as the texts of promotional brochures, or completing the text with images. She even prepared in full the last one on behalf of the manager, but it did not turn out well - there were a lot of factual errors, the text did not match the images. This can probably be attributed to her inexperience and not to a personality trait, because she has her agenda in perfect order and manages the usual tasks without any problems. Her gross salary is CZK 32 000 (cca 1300 EUR)

Frank Brown, 41 years old, high school graduate, works as deputy head of the Advertising Department. For the last six months, however, he has been "out of it", he is getting divorced, his performance is perhaps a quarter of what it should be, and he makes mistakes that increase costs, e.g. he put into print a promotional brochure with a number of factual errors, the entire print run of which had to be shredded. There is no doubt that, were it not for the personal crisis that so mars his performance, he would be a clear candidate for the management of the merged department. He is in his fifth year with the firm, has had



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



experience of successfully running an advertising agency, and knows all the details of the business. He was brought into the firm by Karl Pettigrew. His gross salary is CZK 57,000 per month (almost 2300 EUR).

Viola Adams, MBA, 36 years old, single, with an 8-year-old son. She's been with the company for nine years, it's her first job. She is the driving force, the hard worker, she can be counted on for the implementation of things. She works in the Public Relations Department, she's a permanent fixture there. She speaks two major international languages. She is in charge of preparing texts for all promotional materials. She is skilled in organization, she is able to handle individual projects well, for example the preparation of the exposition at the fair. However, she is not a person of ideas who can get other people excited. She is rather conservative, she solves all conflicts and situations very correctly and with a cool head. Her gross salary is CZK 48 000 per month (approx. 1900 EUR).



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

3-1b Leadership – Decision making and Strategy

Activity: "SURVIVAL IN THE DESERT (case study)"

Adopted from the author: Alonso W. Pond, MA

Main used to measure	Cl. 3: subcompet. Decision-making skills
	Cl. 3: subcompet. Strategic thinking
	Cl. 5: subcompet. Problem solving
Additional used to measure	Cl. 1: subcompet. Understanding
	Cl. 2: subcompet. Effective communication skills
	Cl. 3: subcompet. Empowering others
	Cl. 2: subcompet. Conflict solution
Group setting	in groups (3-5 participants)
Time required	App. 10 minutes for individual solution, 20 min. for teamwork, 5 min. to present the results (and app. 10 min. to learn about the right solution)
Aids	---

ACTIVITY DESCRIPTION

Case study: survival in the desert

Note:

This activity is primarily focused on strategic thinking. In the simulation we will also monitor your ability to assert yourself and "sell" your own thoughts and ideas to others.

Introduction:

The situation described is based on more than 2,000 real cases where men and women survived or perished in the desert depending on their choices. Your own life now depends on how well your team can share their knowledge of a relatively unknown problem. Based on this, you will then be able to make decisions that will help you survive.

Situation:

It's mid-July, about 10 o'clock in the morning, and you've just crashed in the Sonora Desert in the southwestern United States. Your light twin-engine aircraft has completely burned, including the bodies of the pilot and co-pilot. Only the bare structure remained of the plane. None of you were hurt.

Before the crash, the pilot had no way of communicating your position to anyone. However, a look at the ground just before the machine crashed indicated that you had deviated from your originally planned flight course by approximately 65 miles. Just before the crash, the pilot told you that the nearest known habitation was a mining camp circa 70 miles to the northeast.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



The area you're in is fairly flat and looks barren except for a few cacti scattered around. The latest weather report indicated that temperatures in the area will be around 43°C, which means that the temperature just above the ground will reach up to the 55°C.

You are wearing light clothing with short sleeves, shorts, socks, and leather shoes. Each of you has a wallet. Altogether you have about \$2.50 in loose change and \$69 in bills, a pack of cigarettes and a ballpoint pen.

Problem

1. Before the plane took off, your group managed to save 15 items, which are listed on the following page. Your task is to individually rank the importance of these items, placing the most important item first and the least important item at number 15. You can assume that the number of survivors is equal to the number of your team members and that you decided to stay together. However, at this stage you do not discuss with other team members about your order of importance of individual subjects.
2. After you have worked out the individual ranking, the whole team will decide on the joint ranking. Decisions in the team should be made so that, as far as possible, everyone agrees with the decision.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Survival in the desert – the list of items

<i>Items</i>	<i>Individual rating</i>	<i>Team rating</i>
Battery lamp + 4 flashlights		
Pocket knife		
Aerial map of the crash area		
One PVC raincoat - large number		
Magnetic compass		
A set of bandages and gauze		
Loaded pistol - calibre 0.45		
One red and white parachute		
Medicine box with 1000 salt tablets		
About 2 litres of vodka		
About 1 litre of water per person		
Book: Edible Animals of the Desert		
1 pair of sunglasses per person		
1 coat per person		
Cosmetic mirror		

Individual preparation time: 10 minutes

Time for common group solution: 20 minutes



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

EXPERT SOLUTION

Case study: Survival in the desert – expert solution

Alonso W. Pond, MA is the former Chief of the Desert Division Arctic, Desert, and Tropics Information Center of the U.S. Air Force Base. During World War II, he worked for the Allied forces as an advisor on Sahara Desert survival issues. It was there that he encountered countless survival cases that served as the logical basis for his ranking.

Expert ranking with justification:

1. Cosmetic mirror

Of all the items listed, the mirror is the most important one. It is the most powerful tool for letting you know where you are. On a sunny day, a simple mirror can produce light equal to 5-7 million candles. Reflected sunlight can even be seen over the horizon. If you had nothing else available, you still have more than an 80% chance of being noticed within the first 24 hours.

2. One cloak per person

Now that you have a communication system to tell people your location, your next problem is dehydration. 40% of the fluids that are lost from the body in dehydration are lost through evaporation and sweating. You can reduce evaporation by staying still. You can reduce fluid loss through sweating by preventing hot air from reaching your skin. Paradoxical as it may seem, the best way to do this is with raincoats. Without them, survival time would be reduced by at least a day.

3. A litre of water per person

With just the first two items, you could probably survive for 3 days. While a liter of water would not significantly increase survival time, it would help to slow the effects of dehydration at the beginning. It would be best to drink water when thirsty to keep you cool for the first day when important decisions need to be made and a shelter needs to be built. Once the body starts to dehydrate, it is impossible to stop the process with the amount of water you have available. Therefore, saving water would not make any sense at all.

4. Battery lamp

The only quick and reliable night signalling aid is a flashlight. Together with a mirror, it gives you the ability to signal for a full 24 hours. Even during the day, it can be used in several ways. The reflector and lens can be used as a signalling aid or for starting a fire. The battery part can be used for digging or as a water reservoir for distillation (see raincoat).

5. Red and white parachute

The parachute can serve as a shelter as well as a signalling aid. A tall cactus, common in the area, can serve as a tent pole, parachute cords as tent lines. Twice or three times folded parachute will provide enough shade to reduce the temperature underneath by up to 20%.



**Co-funded by
the European Union**

6. A pocket knife

While not as critically important as the first 5 items, it can be useful when building a shelter or cutting a hard cactus that contains liquid. Plenty of other uses puts it in this place.

7. A PVC raincoat

In recent decades, the development of plastic non-corrosive materials has made it possible to build solar systems. If you dig a hole in the sand and cover it with a raincoat, a temperature difference is created that causes moisture to evaporate out of the sand, but also, for example, from the pieces of cactus. The moisture will condense on the underside of the raincoat. A small stone in the centre will form a conical shape and the condensed liquid will drop into a vessel placed in the centre of the hole. Up to 1 litre of liquid per day can be obtained in this way. This can be useful, but unfortunately not enough to be of any great importance. With the physical activity required to obtain water in this way, the body will use about 2 times the amount of fluid you can gain.

8. A loaded pistol

By the end of the second day, your ability to speak will be severely reduced and you may even not be able to walk. The pistol will then be useful as a sound signalling aid, and the cartridges for making fire. The international signal is 3 shots in short succession. There have been many cases where wreckers have not been found simply because they could not make any loud noises. You can also use the pistol as a hammer.

9. A pair of sunglasses per person

Intense sunlight in the desert can cause significant problems, especially on the second day. The shade of a parachute can alleviate this problem, as can blackening the face around the eyes with ashes from a plane wreck. The use of a handkerchief or gauze as a veil with an eye-hole will also help eliminate vision problems. But with glasses it will be much more comfortable.

10. A set of bandages and gauze

Because of the low humidity, the desert is considered one of the healthiest places in the world. As a result of the blood thickening through dehydration, there is very little risk of bleeding out. There is a well-known case of a man who was lost in the desert and was without water, fell among the rocks and injured himself on cacti, but started bleeding only after he was rescued and given a drink of water. Bandages can be used as cords, or to wrap around legs or other parts of the body to protect against dehydration and direct sunlight.

11. Magnetic compass

Apart from the fact that its shiny surface can be used as a signalling aid, the compass cannot be of much use. When the effects of dehydration appear, it can even be dangerous by making someone think to use it and walk away.



**Co-funded by
the European Union**



12. Aerial map of the area

It can be useful for starting a fire or as toilet paper. It can also serve as a head covering or as an eyeshade for one person. It can also be used for distraction, but otherwise is essentially useless and can even be dangerous for the same reason as a compass.

13. Book: Edible Animals of the Desert

The problem the group faces is dehydration, not hunger. Any energy expended on hunting would be too expensive, given the great loss of water in the process. Although there are many animals in the desert, they are rarely seen. They survive only because they lie down, which is exactly what the crash survivors should do as well. If the hunt were successful, the supply of protein would cause an increase in the amount of water needed to process it. A general rule says: If you don't have enough water, don't eat. Even if there was useful information in that book, it would be hard to adjust your eyes to read and concentrate at the moments when dehydration starts to set in.

14. 2 litres of vodka

Alcohol absorbs water. The body loses enormous amounts of water in an attempt to expel alcohol. It is estimated that the body needs about 2.5 units of water to eliminate 1 unit of alcohol. In your situation, consuming vodka would mean death. Vodka can be useful in starting a fire or as a means of temporarily cooling the body. The bottle can also be put to good use. Overall, however, vodka is more dangerous than useful.

15. Salt tablets (1000 tablets)

There is a common myth about salt tablets. The first problem is that with dehydration and water loss, the salt content of the blood increases. Sweat contains less salt than other cellular fluids. Thus, salt tablets would cause a large consumption of water to allow the body to get rid of the increased salt content.

EVALUATION OF THE ACTIVITY

We assess whether the individual/group survived (strategy to stay at the spot and do not go anywhere) and the ability to find the right ranking of items.

Additional criteria are assertiveness, creativity, team work and conflict solution.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

3-3 Leadership – Empowering others

Activity: “ROLE PLAYING”

Primarily used to measure	Cl. 3: subcompet. Empowering others
	Cl. 2: subcompet. Effective communication skills

Secondarily used to measure	Cl. 2: subcompet. Resolving conflicts
	Cl. 3: subcompet. Decision-making skills
	Cl. 5: subcompet. Stress resilience
Group setting	Individually (or in pairs)
Time required	App. 15 min. for each dialogue (role play incl. preparation) (recommended to be implemented in parallel with another activity that is based on individual work of all group members)
Aids	---

ACTIVITY DESCRIPTION

This is an individual activity oriented to test the managerial skills of the participant. The activity requires only a short preparation, about 5 minutes to read the instructions.

During the activity the participant meets an actor who represents his/her subordinate. The object of the activity is to meet the manager's needs efficiently and effectively, but necessarily respecting the subordinate's capabilities.

The participant, as the manager's superior, is not explicitly familiar with the context of the situation as perceived by the subordinate he meets; the subordinate, on the other hand, does not know the form of his superior's need; the purpose of the role-play is therefore to find a solution, for which both parties must first exchange adequate information and understand the situation, constraints, possibilities and needs of the other party !!!

The dialogue itself usually takes about 10 min., the preparation about 5 min.

If time allows, there can be a short feedback, ideally an interpretation of the dialogue by the participant and possibly also by the figurehead + the view of the evaluator.

In case of time constraints, the dialogue can be conducted between two participants instead (see note below).

Considering the overall time demand and the necessity for the evaluators to observe the dialogues, it is ideal to carry out the activity in parallel with certain individual activities of the participants where the observation by the evaluators is not directly needed (e.g. solving individual assignments, processing psychodiagnostic tests, etc.), or in dedicated free time, during longer breaks, etc. Alternatively, it is also possible to split into 2 parallel groups, each of which will be monitored by at least 2 evaluators.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INSTRUCTIONS

Participants are given a written set of instructions. After a brief preparation time, (approx. 5 min.), the actual dialogue follows.

The actor (chosen from among the evaluators) acts rather passively, the initiative of conducting the conversation is left to the participant. However, the figurant also pursues his/her own interests and needs, actively defends his/her positions, defends his/her real possibilities - i.e. tries to "take care of himself/herself". The actor behaves ethically, does not provoke conflict or escalate conflict unnecessarily, but may also react naturally in a conflict situation.

Participants are given a written set of instructions. After a brief preparation time, (approx. 5 min.), the actual dialogue follows.

The actor (chosen from among the evaluators) acts rather passively, the initiative of conducting the conversation is left to the participant. However, the figurant also pursues his/her own interests and needs, actively defends his/her positions, defends his/her real possibilities - i.e. tries to "take care of himself/herself". The actor behaves ethically, does not provoke conflict or escalate conflict unnecessarily, but may also react naturally in a conflict situation.

The dialogue is face-to-face, observed by at least 1 other evaluator (if one evaluator is the actor). In the case of the 2-participant interview variant, the role-playing is observed by at least 2 evaluators.

Depending on the time available, a short feedback can also be made, ideally the interpretation of the dialogue by the participant and possibly also the figurehead + the evaluator's view (this is however more of a DC practice).

Notes and other suggestions/options:

To make the activity more efficient and shorter, it can be implemented as a dialogue between the two AC/DC participants, where the task of each is to "take care of himself"; the context is then explained as a very partnership-based company culture, where the contribution of each individual actor is important and not his formal position (i.e. the supervisor in this case is quite as important and necessary for the company as the subordinate, and they act together as equals. In this variant, observation of the dialogue by at least 2 evaluators is required.

EVALUATION

The evaluation focuses on the managerial competences of the participant, while other observable competences are evaluated secondarily, see below:

(primary) Cluster 3: Leadership; subcompet. Empowering others

- Initiative in conducting the conversation, managing the conversation (... including checking the form of the agreement reached, setting up control mechanisms for the future, etc.)
- Initiative in conducting the conversation, managing the conversation (... including checking the form of the agreement reached, setting up control mechanisms for the future, etc.)
- Assertion of the participant's needs as manager according to the given instructions (the extent to which the participant's needs have been asserted in accordance with the assignment, as



**Co-funded by
the European Union**

well as the establishment of mechanisms through which the participant can potentially control and enforce the fulfilment of these needs in the future)

- Respect for the needs of the other party (the extent to which the needs of the other party represented by the actor were consciously recognised, acknowledged and subsequently adequately reflected in the resulting agreement by the actor's own needs as defined in the assignment)

(primary) Cluster 2: Teamwork; subcompet. Effective communication skills

- Ability to listen in conversation and check understanding of new facts
- Ability to react appropriately, to communicate, to adapt to the language of the actor, to actively check the actor's understanding and vice versa, etc.

(secondary) Cluster 2: Teamwork; subcompet. Resolving conflicts

- Ability to manage possible points of conflict in the dialogue, not to provoke conflict, not to contribute to its possible escalation, to contribute to the clarification of the causes of the conflict and thus to its resolution

(secondary) Cluster 3: Leadership; subcompet. Decision-making skills

- Ability to react to new findings in dialogue by deciding on a new direction, goal, etc., to operationally change one's current perspective, goal, etc. based on new findings.

(secondary) Cluster 5: Interpersonal Skills; subcompet. Stress resilience

- Controlling self and own emotions (coping with the natural stress of the dialogue, elimination of expressions harmful to the quality of presentation, not giving in to emotions, impatience, shortcircuited action, etc.)



**Co-funded by
the European Union**

INSTRUCTIONS (for the participant followed by description of the context for the actor):

(if the language is gender sensitive, appropriate gender reflecting mutation should be used)

Participant

Your role:

You are a senior manager, supervising a team of 4 lead technicians. You work in a company focused on the manufacture and installation of refrigeration equipment. For the purposes of this model situation, your name is Thomas Newman.

You are meeting:

With your subordinate, Mr. George Smith, who is one of the company's chief technicians. He is a specialist in his own right, in whom you have complete confidence (at least professionally). He has been working for the company for 5 years and prefers to do his work alone, without the assistance of others. He has always managed his tasks better than anyone else, but the situation has changed in the last six months. Reliability of performing tasks has decreased, Mr Smith is not meeting deadlines, forgetting not only tasks but also agreed matters (for example, last week you had a small conflict because he did not come to the agreed meeting).

Description of the situation:

You need to perform an important and high-priority task, to produce a cooling device of unusual technical parameters for one of the company's key customers. You would like to entrust the task to Mr. Smith, because he has had experience with this kind of work in the past. He has proven himself to be a capable professional in previous projects, with a first-class grasp of technical issues, a quick learner and always one of the first to work with new technologies. You know that he could carry out the task at hand best of all the principal engineers available to you. However, you're concerned that Mr Smith's current problems with meeting deadlines will affect the task - your company simply must not fail to deliver the refrigeration equipment to your customer on time. You have had Mr Smith call you, you intend to give him the task, stress its importance and ensure that it is completed properly and on time.



**Co-funded by
the European Union**



Actor (alternatively 2nd participant)

Your role:

You are one of the four main technicians working for a company that manufactures and installs refrigeration equipment. You have been with the company for 5 years. For the purposes of this model situation, your name is George Smith.

You are meeting:

Your supervisor Thomas Newman.

Description of the situation:

You are one of the most senior employees in the company. You were there when the company was founded and saw it grow. Your position is key to the company in some ways. The management has repeatedly made it clear that it has confidence in you, which you certainly don't want to disappoint. You know that you are a serious candidate for a relatively important managerial position in the context of the forthcoming change in the company's organisational structure, in which you have a real interest - which is why you are taking on all the possible tasks that come from various quarters. But lately it has been too much for you. You (as each of the chief technicians) lead your own team of 5 line technicians, you are responsible for the timely implementation of projects (currently you are managing 6 of them). Since you are the most senior and the most experienced, you are also "in charge" of one of your colleagues who is new to the position of chief technician, and in the last six months you have also been responsible for training all the new technicians joining the company. As the company is currently growing, this task is currently taking up too much of your time. Every Friday you have to submit a weekly report to your supervisor, which you consider to be quite unnecessary, as it only summarises the facts already recorded in the production support software. In the last six months, you have been catching up with your tasks at the last minute or even postponing them to a later date. Last week you had a conflict with your supervisor because you did not show up for a pre-arranged meeting. But it wasn't anything serious that you couldn't sort out right away. Mr. Newman has now asked you for another meeting without further clarification.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

3-3b Leadership - Decision making a 5-1b Intrapersonal skills - Problem solving

Activity: “IN-BASKET (case study)”

Primarily used to measure	Cl. 3: subcompet. Decision-making skills
	Cl. 5: subcompet. Problem solving

Secondarily used to measure	Cl. 2: subcompet. Collaborating effectively
	Cl. 3: subcompet. Strategic thinking
	Cl. 5: subcompet. Stress resilience
Group setting	Individually
Time required	App. 45-60 min.
Aids	---

ACTIVITY DESCRIPTION

This is a purely individual activity oriented to test the intrapersonal and methodological competences of the participant, especially analytical skills, decision-making (and planning) skills, as well as e.g. strategic thinking, use of delegation possibilities or own stress resilience.

The essence of the activity is the ability to concentrate and operate independently, and as such does not need to be intensively observed. However, evaluators should observe the motivation and commitment with which participants manage the activity, e.g. it may be an interesting signal that someone downplays the task, gives up before completing it, etc.

The activity takes quite a long time, requiring at least 30 minutes, and for most participants more like 45 - 60 minutes (the assignment is deliberately not easy to navigate, even the creation of an adequate output usually requires first a draft version and then a clean copy, few people manage to create the required chronological overview of the activities straight away).

However, the activity allows, for example, to be spread out over an even longer period of time, with the participants being able to complete other interactive activities in between, e.g. role-playing.

The case study has more than one correct solution, one of the possible solutions that meets the requirements of the brief is attached at the end of this document below. It is not important, however, whether the participant perceives as more important matters of work or personal nature (if he/she prioritises the care of his/her own children over work, this will be fully respected in the evaluation).



Co-funded by
the European Union

INSTRUCTIONS

Participants are given a full set of written instructions, i.e. a description of the situation, explanations and the formulation of the task itself, as well as additional information and a map of the locations to which the individual tasks relate. The assignment is then supplemented with a record sheet and space for notes.

Participants solve the assignment independently without group interaction and without interaction with the assessors.

The correctness, clarity and comprehensibility of the output will be assessed.

EVALUATIONS

The evaluation focuses on the managerial competences of the participant, while other obviously demonstrated competences are evaluated secondarily, see below:

(primary) Cluster 3: Leadership; subcompet. Decision-making skills

- Work out the solution in its entirety, i.e. find solutions to all tasks (even if in some cases the solution would be "don't solve the matter at the moment, postpone"), i.e. number of solved vs. unsolved tasks
- Number of logical errors in the solution
- Clarity and comprehensibility of the solution (output)

(primary) Cluster 3: Leadership; subcompet. Problem solving

- Work with preferences of tasks, differentiate between importance vs. urgency
- Resolve the more important issues, prioritizing them over the more minor ones (which may or may not be resolved at all)
- Address the more urgent over the less urgent (which can possibly be postponed)

(secondary) Cluster 2: Teamwork; subcompet. Collaborating effectively

- Ability to utilize the capacities of co-workers, delegate adequately

(secondary) Cluster 3: Leadership; subcompet. Strategic thinking

- Ability to consider the situation in its entire context as well as in the relevant timeframe, to adequately cover key tasks of strategic importance in particular

(secondary) Cluster 5: Interpersonal Skills; subcompet. Stress resilience

- Ability to manage the solution in its entirety, complete it in a comparable quality (no obvious "drop" in the quality of the solution, the solution is not sloppy), ability to persevere and not "throw in the towel" during the solution process.



**Co-funded by
the European Union**



INSTRUCTIONS (For participants:

Description of the situation:

You have been working for a relatively short period of time as a team leader, formally you have the position of Head of one of the departments of the local municipality. Your normal working hours are from 8:00 a.m. to 4:00 p.m. and until 5:15 p.m. on Mondays and Wednesdays. According to the internal guidelines, working hours can be adjusted in exceptional cases, but you must inform your superior one day in advance and still adhere to the weekly working hours. You enjoy your work, it is varied and you have a lot of interaction with people.

Your team consists of **3 specialists in the position of independent clerks (Mary, Dagmar and Petr) and 1 intern (Hank)**. Hank is fully qualified to do the work, but comes to work only on Mondays to Thursdays, usually between 3.00 pm and 5.00 pm. You are responsible for the results and functioning of your team.

Two members of your team (including you) must be available to the public every day.

The last weekend was pleasant, but it went by quickly. As late as Friday evening you were still dealing with the failure of the electronic application system and the draft schedule of activities for the following week. You were mainly dealing with who would be available to the public on which days. The person providing the service to the public is usually fully occupied during the day and the possibility of doing anything else on those days is minimal.

In the end, you agreed on this matter with Mary and Dagmar for Monday and Tuesday, because Petr was already doing this activity all day on Wednesday, Thursday and Friday, and he needed to take Monday and Wednesday off to take care of private business in town, which you approved on Friday.

Your spouse is leaving tomorrow (i.e. Tuesday) for one week at the spa. This means that you - together with your mother-in-law - have to take care of your children (of which the twins go to kindergarten). **On Friday at 5 pm you leave for the weekend to visit your spouse at the spa**, so that you can also relax.

It's Monday, shortly after 8 a.m. You've just been caught by Marushka, who says she needs to see you about a citizen's complaint. She's already tried to resolve the situation herself, but to no avail. Now she doesn't want to delay you (yet she has already managed to deprive you of almost 30 minutes), she has to get to a meeting quickly herself.

It is 8:30 am and you must now begin to take care of all business and plan your tasks for the week (see attached documents for tasks, information and other current business to be taken care of).



**Co-funded by
the European Union**



Explanatory notes to the assignment:

Please see the enclosed documents for further information. Each of the places that are important to you during this week is plotted on the attached map. The lines between the locations indicate possible routes, including the time required to move your car, which is available to you.

For some tasks, the time you need to complete the matter is indicated. If no time is given, it is up to you to specify it. In your time calculations, please always allow for minutes to move from place to place.

Task:

Make a plan of activities and tasks for the week and write in your recording sheet how would you solve each task. Fill in the columns on the record sheet:

1. Create a plan of activities and tasks for the whole week, not only for you personally, but for your whole department (i.e. your whole team).

The goal is to cover all the activities your department needs to do, as well as the activities you need to do personally.

However, it is up to you if you decide to postpone some of the activities (activities) to the next week or for ever (if this is possible).

2. Draft the above required weekly plan of activities and tasks in the form of a clear output that shows which activities will be carried out when and by whom.

The specific form and method of processing is up to you.

The output should be correct (i.e. it should meet the requirements) and at the same time be adequately structured, clear and therefore understandable.

To identify individual activities or tasks, you can use the keywords given as headings for each additional information attached below.

Do not forget the tasks and activities mentioned directly in the situation description above.

As part of the output, e.g. on the last page of the output or on the reverse side of the output, note which tasks, activities or other assigned activities you have deliberately decided to postpone or not to do at all.

3. You have 60 minutes to complete the entire case study.



**Co-funded by
the European Union**



Additional information:

Printout	EU requests a list of all submitted grant applications with comments on their approval/rejection, including criteria and reasons. The list must be sent from your system no later than 13.00 on Monday. It takes approximately 2.5 hours to create the summary. This is only an extract from an existing database, not a creation of new material.
IS	The IT Department is exceptionally requesting all team leaders to meet on Tuesday, 9.00 - 10.30 a.m. to learn about the process of implementing the new Information system.
Marketing	The municipality is holding an open day and your team must submit an list of what promotional items you have available, including the types and numbers. The list will take about 40 minutes to complete.
Meeting	For a week now you've been promising a meeting with the director of a local NGO with which your team works. You have agreed to meet at your office on Monday at 2 pm.
Spa	Your spouse is leaving for the spa on Tuesday. You promised to take him/her to the train so he/she doesn't have to carry all the suitcases. He/she is supposed to let you know what time the train leaves.
Database	You must provide database training for your employees within 2 weeks. Management is asking you to comment by Friday on when and how you will provide the training - the training is important for the provision of services to the public, the records of which are due to be transferred to database software in the near future. So far you have no idea about this issue.
Tourney	On Wednesday at 3:30 p.m., your oldest son is playing in a student tennis tournament, and you promised him you wouldn't miss it.
Report	An internal audit took place on Friday. You must submit a report on its results to the management within 7 days of the audit. The report will take you approximately 1.5 hours to complete.

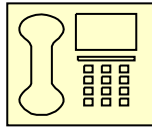


**Co-funded by
the European Union**

Additional information: Printout

Consultant Mary came at 10 a.m. to tell you that the database software needed to make the printouts is not working and the list of grants will probably not be sent on time.

Additional information: Celebration



Your sister calls, "Hi, I hope you haven't forgotten your dad's birthday party next Sunday!?! You're in charge of the music and restaurant selection, we have to pay the deposit by Thursday at the latest! Thanks and see you."

Additional information: Meeting

This email came from the director of the non-profit organization at 8 a.m. this morning.



Additional information: Cooperative

You found this note in your mailbox this morning:

Dear housing cooperative members,

on Wednesday from 4 to 7 p.m. our housing cooperative will hold a meeting. The hight of the utilities advance payments for the next four years will be discussed. We would like to increase them by about 300%. We look forward to seeing you.
Board of Trustees.



**Co-funded by
the European Union**



Additional information: Dagmar

You just received this SMS:

I have a fever and a shiver,
sorry, I can't come to work
until at least Wednesday.
I'll let you know then.

Additional information: Spa

Honey, my train
leaves tomorrow at
9:00. Thanks for the
ride!

Additional information: Mary

Mary just contacted you again.

Don't forget me, I want to
discuss with you the
disgruntled citizen, Mrs
Vrana. The one who
complained. She's coming in
for a consultation this
afternoon.

Additional information: Training

There is an interesting time
management seminar on Wednesday
morning (8 - 12), just for the best team
leaders - you are cordially invited!



**Co-funded by
the European Union**

Additional information: Twins

You got a text message from the kindergarten teacher:

"Hello, please pick up Celeste and Kleo today as soon as possible - we suspect smallpox. I couldn't reach your wife/husband. Sincerely, Zubata, kindergarten teacher



Additional information: Mother-in-law

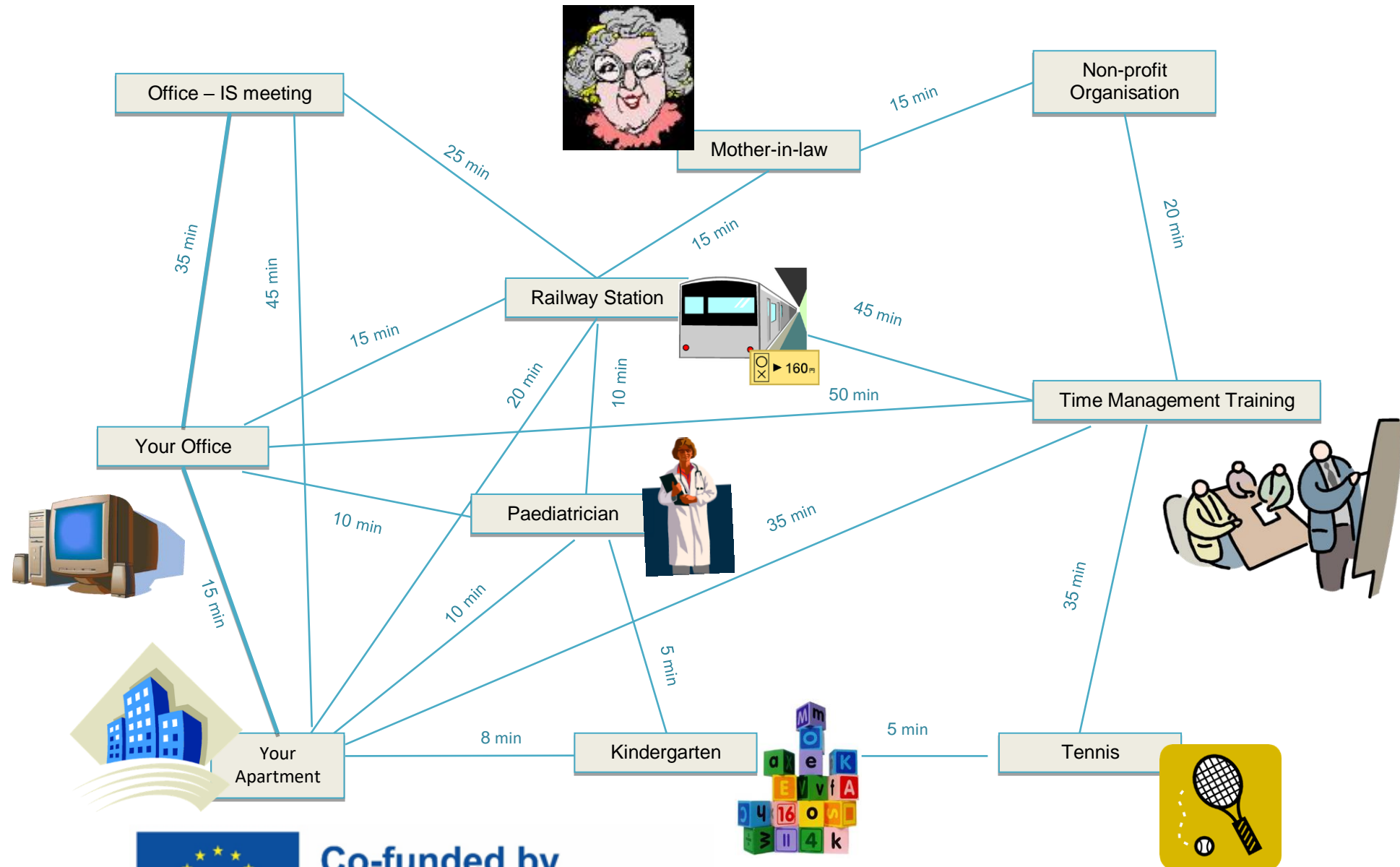
Your mother in law sent you this message

Hi,
when do you need help with babysitting? Please be warned that I can't help you tomorrow afternoon and Thursday afternoon, I have to prepare our Doggie for the show on Saturday.



Co-funded by
the European Union

Map:



Co-funded by
the European Union



Notes

– *place for your notes*



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

ONE OF POSSIBLE ACCEPTABLE SOLUTIONS (not to be handed out to the participants!):

Day	Manager	Mary	Dagmar	Petr	Hank	Saldo
Mon	(8,00 Arrival) 8,30 Info, mother in law, children 8,35-8,50 Time plan 8,50 Info boss about overtime during the week and not submitting the list of funds for EU in time 8,55 Mail director--> thursday 9,00-15,00 Public (incl. disgruntled citizen Vrana and preparation for her) 18,00 departure	Public at the same time tries to solve the SW database problem (needed to get EU list) Dealing with Vrana and her case during the work hours	sick	holiday leave	15,00-17,00 Public	+1,5
Tue	8,00-8,30 Spouse-train 8,30-9,00 transfer 9,00-10,30 meet. IT/IS 10,30-11,00 transfer 11,00-14,30 EU list 14,30-15,00 restaurant 15,00 departure kids to doctor, babysitting	Public	sick	Public	15,00-17,00 not specified	-2
Wed	Arrival 6,30 9,00-15,00 Public (training not, cooperative meeting not) 15,00 departure transfer + son's tourney + pay the restaurant reservation	public	sick (but could be only until Tuesday)	holiday leave	15,00-17,00 Public	0
Thu	Arrival 6,30 Database NGO Director 15,00 departure babysitting	2 employees public Management listing	2 employees public	2 employees public	15,00-17,00 not specified	0
Fri	Arrival 6,30 Report, audit 15,30 departure 17,00 departure to spa	2 employees public	2 employees public	2 employees public	works only Mon-Thur	+0,5

In-Basket: one of possible solutions (highlighting = time needs to be respected)



**Co-funded by
the European Union**

4-1a Creativity and Innovation - Creativity

Activity “Drawing”

Primarily used to measure	Cl. 4: sub-competence Creative thinking
Secondarily used to measure	Cl. 4: sub-competence Flexibility and adaptability
Group setting	Individual assignment - all participants work at the same time
Time required	15 min., 8 minutes for the actual work
Aids	Instructions printed on an A4 sheet (one sheet for each participant)

INSTRUCTIONS

Within 8 minutes, draw as many of the most diverse and creative pictures as possible, where each picture is created by drawing additional elements to the presented shape (it can be positioned to any different angle).

So, it's about creating other images that always include the specified shape again - not just drawing various elements around the only one given shape!

If the picture meaning is not obvious from the resulting image, add a written description.

Finally, mark the two pictures you think are the most original ones.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



EVALUATION

Number of images (we assume an average of 11-12, maximum of about 18), number of completely unique and original images (we assume an average of 2).

Minus points are for rigid adherence to only a given shape without additional illustrations and seeking only for different meanings and explanations of the same shape.

Additional minus points for the flexibility criterion are for using the shape always in the same position / angle.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



4-1a Creativity and Innovation - Creativity

Activity “Use of an item”

Primarily used to measure	Cl. 4: subcompet. Creative thinking
Secondarily used to measure	Cl. 4: subcompet. Flexibility and adaptability
Group setting	Individual assignment - all participants work at the same time
Time required	10 min., 8 minutes for the actual work
Aids	Instructions printed on an A4 sheet (one sheet for each participant)

INSTRUCTIONS

Within 8 minutes, write as many possible creative and practical uses of a clothes hanger as possible. Quantity and originality are judged.

Then mark the two solutions you think are the most original.

Alternatively, other common items can be used as alternative assignments - a soup spoon, a comb, etc.

EVALUATION

Number of proposed uses (we estimate an average of 14-16, maximum 24), number of completely original and unheard of ideas (we estimate an average of two).

Extra plus and minus points in the flexibility criterion:

- + Uses that are not fixed to the use of the hook on the hanger as a distinctive element.
- Uses that mostly fixate only on using the hook on the hanger as a distinctive element

Bonus points for flexibility: different hanger materials taken into account.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



4.2a Creativity and innovation - Flexibility and adaptability

Activity: "TRANSCRIPT"

Main used to measure	Cl. 4: subcompet. Flexibility and adaptability

Additional used to measure	---

Group setting	individually
Time required	App. 15-20 min.
Aids	A4 paper sheets with prepared text samples

ACTIVITY DESCRIPTION

This is a purely individual activity that requires virtually no preparation, and can be executed both in an online and on-site AC/DC. The purpose of the activity is to push the participants to behave different from their usual patterns and to step out of their comfort zones.

It differs from many other activities in that the actual work the participants conduct serves as a tool to uncover their flexibility and ability to adapt to changing work assignment. The actual outcome of the work done serves just as a secondary indicator that can help the evaluators decipher the participants competence level.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



INSTRUCTIONS

Step 1 (5 min.):

The participants are handed out the first worksheet with the following text and are given the following instructions: „Your task is to write the following text, **as neatly as possible, using your own best handwriting style**. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.” The moderator will also explain, that the participants may choose not to complete the task in any stage if they find the work too difficult.

Dear User,

Handwrytten uses robotic handwriting machines
that use an actual pen to write your message.

The results are virtually indistinguishable from
actual handwriting.

Try it today!

The Robot



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Step 2 (5 min.):

When finished, the participants are handed the second work sheet with the following text and are given the following instructions: „Your task is to copy the following text, **as close to the original handwriting style** as possible. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.”

Dear User,

Handwrytten uses robotic handwriting machines that use an actual pen to write your message. The results are virtually indistinguishable from actual handwriting.

Try it today!

The Robot



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Step 3 (5 min.):

When finished, the participants are handed the third work sheet with the same text and are given the following instructions: „Your task is to copy the following text, **as close to the original handwriting style** as possible, but **using your other hand**. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.”

Dear User,

Handwrytten uses robotic handwriting machines that use an actual pen to write your message. The results are virtually indistinguishable from actual handwriting. Try it today!

The Robot



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Step 4 (5 min.):

When finished, the participants are handed the fourth (empty) work sheet with the same text and are given the following instructions: „Your task is to make two parallel copies of the previous text, **as close to the original handwriting style** as possible, but **using both hands at the same time**. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.”

Notes:

Further steps are possible with each step increasingly more difficult than the step before. It is the reaction with which the participants set about to work that matter the most.

EVALUATION

The evaluators focus on the following observations that indicate the participants flexibility and adaptability.

Flexibility is indicated by:

(primary) Cluster 4: Creativity and innovation; subcompet. Flexibility

- Reaction to the assignment (particularly in the second and third step of the activity, as the participants are forced to step out of their usual patterns of work).

(primary) Cluster 4: Creativity and Innovation; subcompet. Adaptability

- Quality of work and diligence with which the work was conducted (the first step serves as a measure of the participants ability to write neatly and thus serves as a benchmark for evaluation of the following stages).

Note: this activity may not yield the best results if the participant is able to write with both hands, e.g. is he is left handed and taught to write with right hand. Thus it is good to supplement the observation from this activity with observations of reactions the participants made through the entire AC/DC in reaction to the changing nature of all the activities)



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



INSTRUCTIONS (participants):

Your task is to write the following text, as neatly as possible, using your own best handwriting style. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.

Dear User,

Handwrytten uses robotic handwriting machines
that use an actual pen to write your message.

The results are virtually indistinguishable from
actual handwriting.

Try it today!

The Robot



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Step 2: Your task is to copy the following text, **as close to the original handwriting style** as possible. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.

Dear User,

Handwrytten uses robotic handwriting machines that use an actual pen to write your message. The results are virtually indistinguishable from actual handwriting.

Try it today!

The Robot



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Step 3: Your task is to copy the following text, **as close to the original handwriting style** as possible, but **using your other hand**. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.

Dear User,

Handwrytten uses robotic handwriting machines that use an actual pen to write your message. The results are virtually indistinguishable from actual handwriting.

Try it today!

The Robot



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Step 4 (5 min.):

When finished, the participants are handed the fourth (empty) work sheet with the same text and are given the following instructions: „Your task is to make two parallel copies of the previous text, **as close to the original handwriting style** as possible, but **using both hands at the same time**. The overall look and number of transcript errors you make matters, so please, try to work as thoroughly as possible. You have 5 minutes to complete your task.”



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

4-2b Creativity and innovation – Flexibility and adaptability

Activity „9 dots“

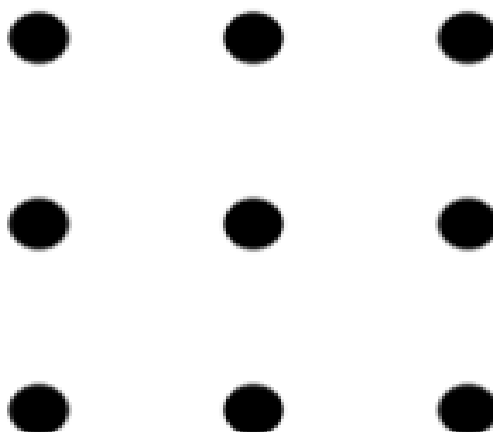
Adopted from the author: A. Cyril Pearson

Primarily used to measure	Cl. 5: sub-competence Flexibility and adaptability
Secondarily used to measure	Cl. 4: sub-competence Creative thinking, Problem solving
Group setting	Individual assignment - all participants work at the same time
Time required	25 min.
Aids	3 instruction sheets on three A4 sized papers (three sheets with the same image but different task for each participant)

INSTRUCTIONS

Within a maximum of 15 minutes, solve three tasks one after the other:

1. Connect all these dots with **four lines** in one stroke so that the lines intersect the dots (they must be straight lines with a pencil or pen and it is not possible to draw any of the lines multiple times)



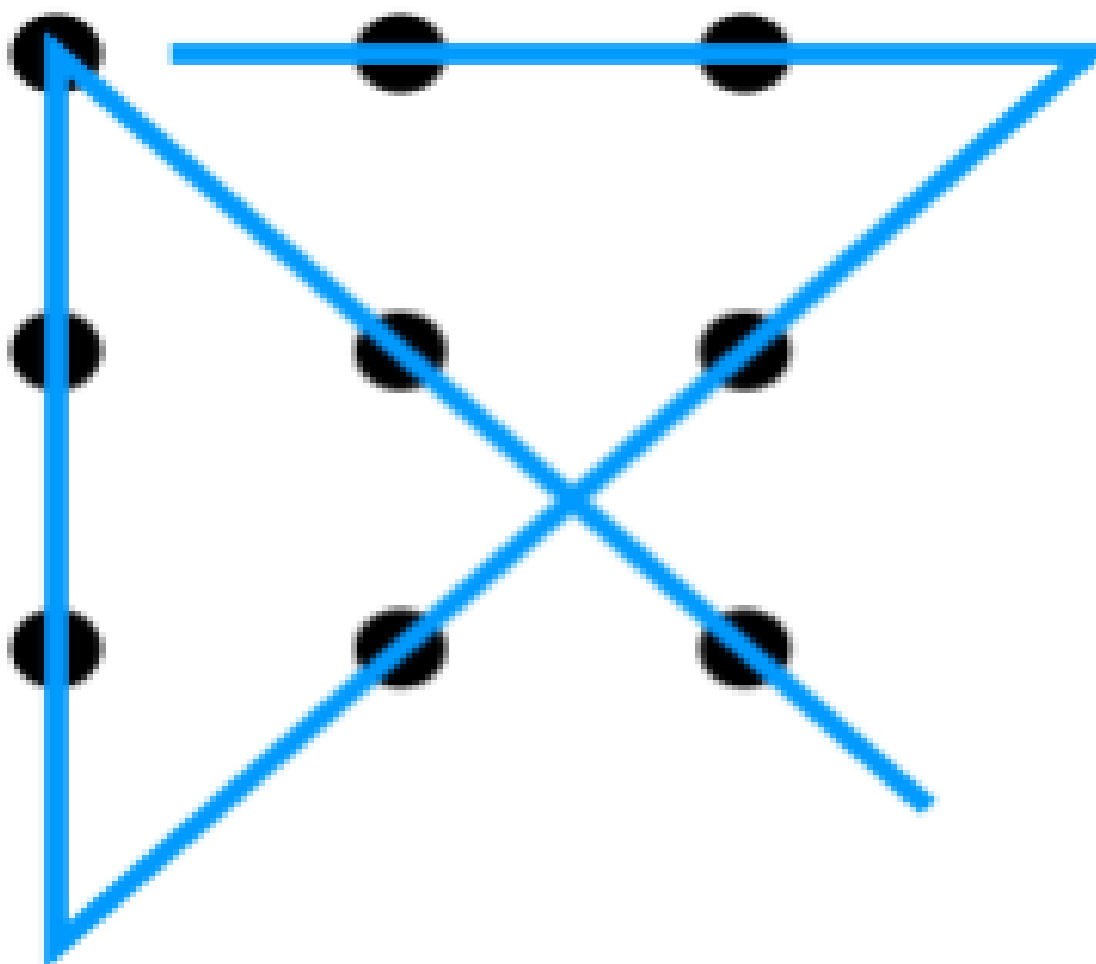
**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

2. Connect all these dots with **three lines** in one stroke so that the lines intersect the dots (they must be straight lines with a pencil or pen)
3. Connect all these dots with **one line** so that the line intersects the dots (again it must be a straight line)

CORRECT SOLUTIONS

1-) In the first case, the correct solution is the only one that is generally known from the most famous out-of-the-box thinking quizz. Many people have maybe seen it once upon a time, but even to them it takes some time to rediscover the correct solution:



And some don't rediscover it at all...

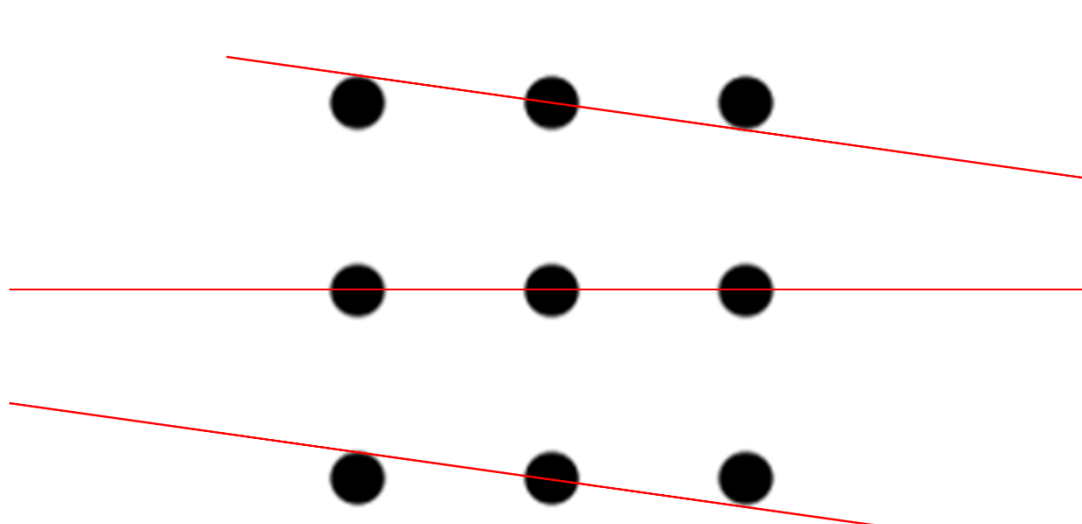


**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

2.) In the second case there are more possible solutions:

This is the most effective one:



Participants often come with solutions, such as:

- Intersection of parallels at infinity = which is a mathematically acceptable solution, but not in the real world.
- Another proposed solution is usually three lines intersecting the dots, but in such a way that it is necessary to circle the globe twice = this is a factually acceptable solution, but somewhat time- and financially demanding.

However, the correct solution simply overcomes the boundaries of the paper on which the circles are drawn...!

The second false paradigm that the participants usually have to overcome here is that the dots are not actually dimensionless points as many suppose, but really dimensional dots. So it is just enough to run lines through their edge, centre and second edge, overcome the boundaries of the paper for the lines to meet, and the solution becomes obvious.

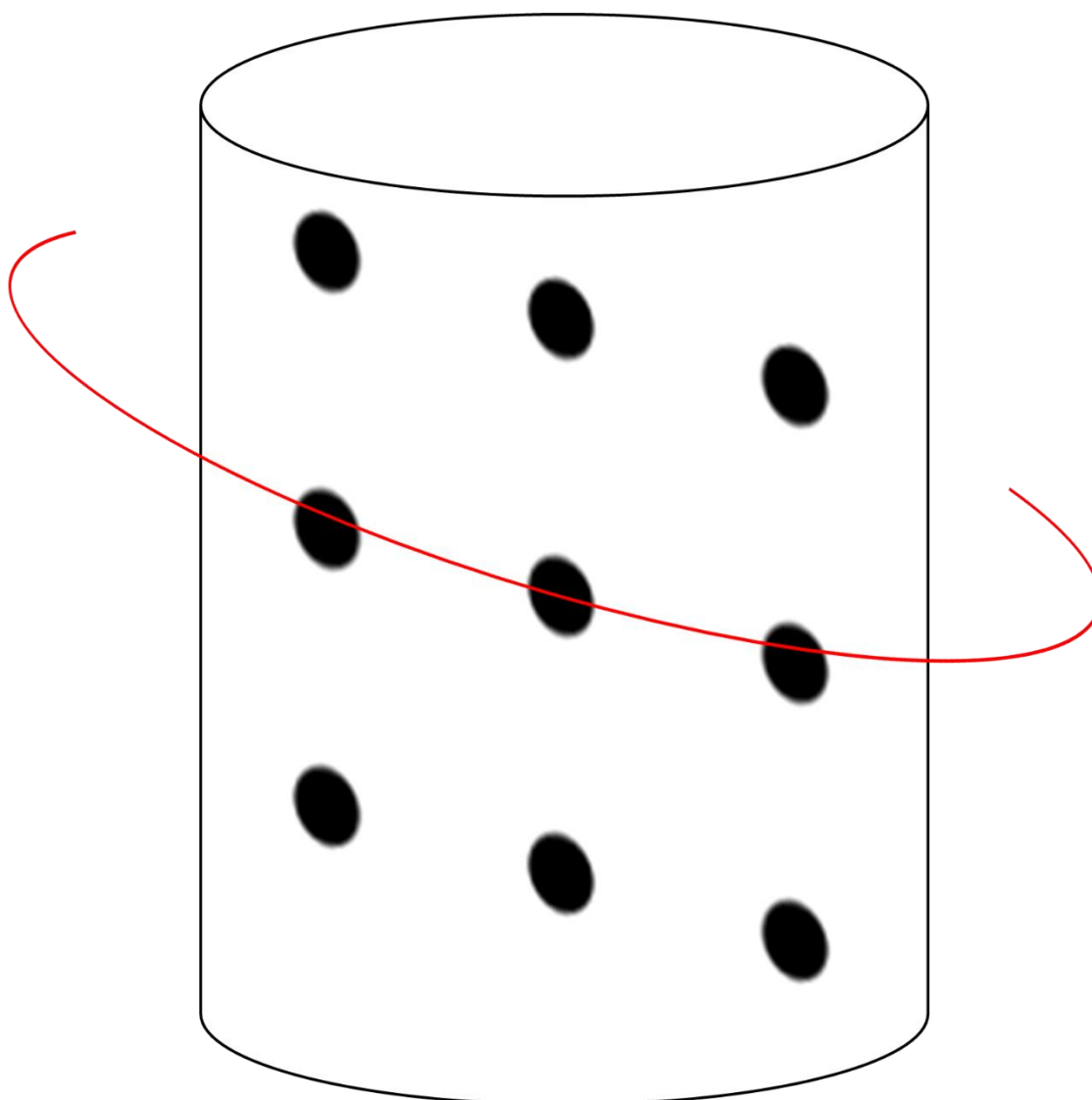
3.) In the third case, where the dots need to be connected with a single line, the greatest amount of possible solutions is available:

- Use a single thick line, which is a creative solution, but violates the current framework of the pen thickness line, so we do not accept it as valid
- Cut the paper and connect the points in a linear fashion = OK, but here we disturb the integrity of the paper, which is unnecessarily energetically demanding
- Folding the paper into an accordion = OK, this solution is possible, but we are also disrupting the original structure of the original shape



**Co-funded by
the European Union**

- Sometimes, some participants find a solution in the form of rotating the paper with nine dots a bit, turning it into a cylinder and leading a straight line like a spiral around its circumference:



This solution is considered as an acceptable one.

However, the most economical and by far the most elegant solution is to look at the given shape of nine dots as a 3D structure from a 2D perspective. This way, the nine original dots have long been connected already by a single line of their base! Only no one has seen it there yet. In our case, however, it is enough to lift up the flipchart paper with dots and show the audience its edge...



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



EVALUATION

Completion of all three assignments correctly while observing the parameters and not violating the rules

Number of different solutions for the second and third assignments

Effectiveness and simplicity of individual solutions

Solving the tasks well below the time limit



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



5-1 Intrapersonal skills - Problem solving

Activity “Camels”

Primarily used to measure	Cl. 5: Problem solving
Secondarily used to measure	Cl. 4: sub-competence Creative thinking Cl. 1: sub-competence Presentation
Group setting	Individual assignment - all participants work at the same time
Time required	10 minutes for individual ideas. Total 25 min. - including the presentation of individual participants' solutions, the observer's comments in terms of their effectiveness, the presentation of the correct solution and its alternatives, as well as the explanation of the ineffectiveness of the other proposed solutions
Aids	Instructions on a single A4 sheet (one sheet per participant)

INSTRUCTIONS

Read the following riddle and help the brothers fulfil their father's will:

Once upon a time, an Arab wise man rode a camel through the desert. In an oasis, he sees three men arguing excitedly. "May I help you?" the wise man asks. "Sir," one of the men explains, "our father died a few days ago, leaving seventeen camels. His last will was that one half of the camels should go to the eldest son, one third to the middle one, and one ninth to the youngest son. And so we cannot agree."

ASSIGNMENT

Propose to the brothers the most efficient solution. Assessment criteria: number of different solutions, their effectiveness, sustainability, and correctness in following the father's will.

Then mark the two solutions you think are the most original.

You have about 10 minutes.

THE CORRECT SOLUTIONS

The correct solution is:

"I will help you," the wise man replies, "Borrow my camel and you will have eighteen. Half of it - nine - will be taken by you, the eldest son. You, the middle one, will get a third - six. And a ninth - two – will go to you, the youngest son. The eighteenth camel you will then return to me."

Similarly, the correct solution would also be for the brothers to add the 18th camel only in their imagination, count with it when dividing the camels and then to think the 18th one off.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



Correct solution is also mere mathematical deduction using the least common multiple (it is the correct solution, but based only on knowledge of mathematics, and not systems thinking)

The quiz is an exercise in non-problematic systems thinking, where the key is to ask under what conditions the assignment would have a solution, and then proceed as if those conditions were fulfilled (18 camels), even though the father left only 17.

INCORRECT OR INEFFECTIVE SOLUTIONS

1. Giving up the quiz on the grounds that it has no solution
2. Killing and eating one camel = no solution and reducing the paternal property
3. Killing and eating more camels = also does not lead to a solution, and devalues the father's heritage even more
4. Kill and eat all the camels = total devaluation and waste of the father's heritage
5. Sell the camels and divide the money in proportion to the father's will = loss of value (money grows more slowly than camels reproduce and is more likely to be spent by the brothers than reproduced)
6. Kill the wise man and steal his camel = mathematically correct solution, but not ethically or in terms of consequences, because his life was wasted unnecessarily
7. To agree among themselves on an approximate division according to the father's will = only an approximate, not an exact solution (not recognized as correct one in our case)
8. Wait for one of the camels to have a young = it takes a long time and in the meantime the brothers will probably kill each other (so it is also not recognized as an effective solution)
9. Kill the other two brothers and keep everything = destructive solution in the spirit of modern times
10. Pay a sage to kill the other two brothers = similar to hiring a shooting man
11. One of the brothers to keep all the camels, manage them, and pay the other brothers according to the shares given = business-wise, this is an interesting solution that could work, but not if taking into account the human nature. This is likely to cause a lot of bad blood on all sides - there will always be someone who feels injustice - most of all those who work for others and take shares from their work, so overall it is a dysfunctional idea
12. Weigh the camels and divide them by weight = probably won't work out according to father's will so it will end up in more arguments
13. Giving up one camel to the wise man = interesting sacrificial solution, but also doesn't lead to anything constructive
14. Valuing the camels according to quality and reproductive ability and dividing them according to the ratio given by the father - but who will decide on the objective value of the individual animals - plus there will always be 1/18 of the total value left undivided anyway = another source of disputes.

SOLUTIONS ON HALF THE WAY

1. Lease all the camels to a company that will share the profits with the brothers in the ratio prescribed by the father = creative business solution, but the brothers would probably not be patient enough waiting for the returns. The company will be given a management fee of 1/18.
2. The brothers will jointly form a firm into which they will put their joint assets. They pay out shares according to their father's distribution = business-wise this is probably a workable



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



solution, but it will probably collapse due to the brothers' human nature and quarrelsomeness. Who will run the company? And who gets to keep the remaining $1/18$?

3. Achieving the correct solution by rounding = in this case it is a factually acceptable final solution, but not achieved by a correct procedure from which the proponent does not learn the necessary lessons.

ASSESSMENT

We evaluate whether the participant found the correct solution = only 3 are correct:

1. Borrowing one camel from the sage, then dividing the 18 camels according to the father's will, and then returning the excess camel to the sage.
2. Imagining one extra camel, dividing the amount among the brothers as if there were 18 of them, and then unthinking the one imagined = a great abstract solution.
3. A mathematical solution based on finding the least common multiple = OK, but the solution was only found based on the participant's knowledge of mathematics, not the participant's own thought input.

All other solutions are credited to the participants according to their effectiveness.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

4-2b Intrapersonal skills – Decision making (official test)

Activity „Activity: Decision making under time stress - official test with norms“

Primarily used to measure	Cl. 5: subcompet. Resilience
Secondarily used to measure	–
Group setting	Individual assignment - all participants work at the same time
Time required	15 min.
Aids	1 instruction sheet for each participant

Adopted from the author: Eva Komárková

ACTIVITY DESCRIPTION

This is a purely individual activity that requires virtually no preparation, and can be executed both in an online and on-site AC/DC. The purpose of the activity is to measure participant's ability to make decisions and solve problems under time pressure. .

The tasks in this test have an increasing difficulty. It is virtually impossible to solve all the tasks in the specified time limit. Their proper solution does not require as much intelligence as it requires concentration and attention.
















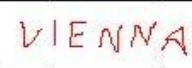
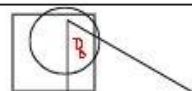











































INSTRUCTIONS

The instructions for the participants are simple: there are 30 tasks and the participants have 10 minutes to solve them. The moderator announces every minute starting with the fifth one.



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.


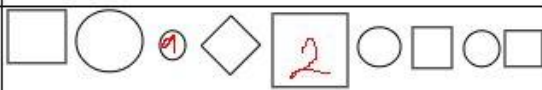
1.	Draw a cross to squares that are bigger than this one: 	  																								
2.	Write second letter of the alphabet to the second circle from the right:																									
3.	Cross out all rectangles:	      																								
4.	Write in the right square how many seconds a minute has and in the left square how many hours a day has:	  																								
5.	Write the name of the capital of Austria in the largest box:																									
6.	Write an eight in the space that is all in the circle, in the triangle, and in the square:																									
7.	Make crosses in the rectangles under the boxes, where two or three of the marks are the same:	<table border="1"> <tr> <td></td> <td>WA</td> <td></td> <td>AA</td> <td></td> <td>OW</td> </tr> <tr> <td></td> <td>OK</td> <td></td> <td>o *</td> <td></td> <td>o </td> </tr> <tr> <td></td> <td>X</td> <td>7 </td> <td> 7</td> <td>M 4</td> <td>* o</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>		WA		AA		OW		OK		o *		o 		X	7 	 7	M 4	* o						
	WA		AA		OW																					
	OK		o *		o 																					
	X	7 	 7	M 4	* o																					
																										
8.	Cross out the word that has the most letters and circle the word that has the fewest letters:	DRINK - WOMAN - <u>SHE</u> - CAROL - PRAGUE																								
9.	Write the correct answer to the question in the first square and the incorrect answer in the third square: How many months does a year have?:	   																								



Co-funded by
the European Union

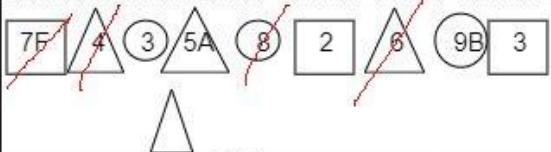
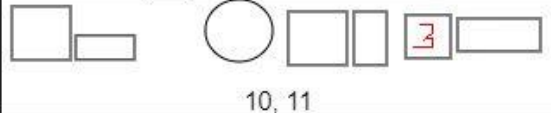
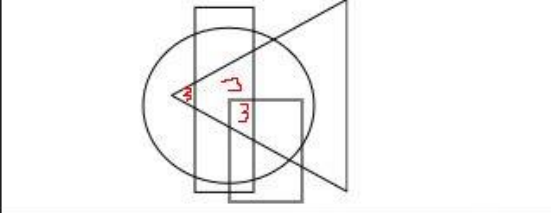
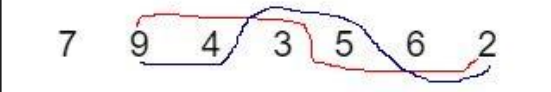
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

10.	Cross out the third, fifth and seventh digit in this row:	3 - 5 - 8 - 2 - 1 - 4 - 9 - 2 - 7
11.	Make a horizontal line above the word, that does not denote money:	CROWN - PENNY - <u>DIAMOND</u> - CENT
12.	Cross out any number that is greater than 20 and less than 30:	34-79-56- 25 -87-68-82-47- 27 -31-64-93

13.	Cross out all words starting with O,M,U if they have less than five letters:	MY -OBITUARY-URGENT-ARAB- OLGA -ID- USE
14.	Write in the smallest square how many rings are in this row:	
15.	Write the smallest number in the largest of these squares, and the largest number in the smallest circle:	 8 6 5 9 7 3 6 2 4
16.	Circle all even numbers that are smaller than 37 and cross out all numbers greater than 83:	34 -79-56-25- 87 -68-82-47-27-31-65- 93
17.	Circle each number divisible by four, that is not greater than 40:	80-18- 4 -9-41-2- 24 - 16 -30-3-17-48
18.	Write the first letter of the day that follows Wednesday in the last square and the last letter of the day before Saturday in the first square:	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px 5px;">Y</div> <div style="border: 1px solid black; width: 30px; height: 30px;"></div> <div style="border: 1px solid black; width: 30px; height: 30px;"></div> <div style="border: 1px solid black; padding: 2px 5px;">T</div> </div>
19.	Underline the names that refer to a profession:	<u>SMITH</u> - <u>THATCHER</u> -GREEN-NEWMAN- <u>WHITE</u> - <u>RIDER</u> -BROWN- <u>TAYLOR</u> -HARRIS
20.	Cross out all numbers that are smaller than 10 and greater than 5 provided they are not even:	2 - 8 - 12 - 7 - 6 - 4 - 9 - 3
21.	Note the words that have an even number of letters and those that have less than 4. Underline the latter and circle the former:	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> PERSON MUMMY </div> <div style="text-align: center;"> <u>BAG</u> <u>BIT</u> </div> <div style="text-align: center;"> LECTOR FREEDOM </div> </div>



Co-funded by
the European Union

22.	Cross out every even number that is not in a square and every odd number that is in a square with a letter:	
23.	Write a number in the last square, which, when added to the two given numbers, gives the correct answer to the question "How many months are in 2 years?"	
24.	Write number 3 in all areas that are bounded by straight lines only:	
25.	Cross out all even multiples of seven greater than 20:	7 - 38 - 49 - 14 - 28 - 54 - 35 - 42
26.	Underline the letter that is located in both the word duck and the word mustard.	m - b - <u>u</u> - i - v - k - d - f - t - n - y
27.	Connect the largest and smallest numbers with a line that runs under the number 3x larger than the smallest number and over the number 3x smaller than the largest number. You can draw around the others as you like.	7 9 4 3 5 6 2 
28.	Underline all words referring to masculine persons:	<u>PRIEST</u> - <u>DUKE</u> - WIFE - <u>LORD</u> - <u>LAD</u>

29.	If there is more than one letter in the 3 words listed side by side that occurs in all of them, cross out every third letter of the second word. If not, underline all the vowels in the word that is a verb:	<u>FELONY</u> - BAGPACK - CONDOR
30.	The given names and surnames belong together in the following manner. When they are arranged alphabetically, the first given name pairs with the last surname. The second given name with the second last surname etc. Connect the	<u>JOHN</u> - ALEX - VINCENT - MARK - FRANK PARKER - TAYLOR - DIXON - LEWIS - <u>MILLER</u>

EVALUATION

The evaluators focus on the following observations that indicate the participants stress resilience.

They do so by focusing on:

(primary) Cluster 5: Intrapersonal skills; subcompet. Resilience

- Number of correct solutions

(primary) Cluster 5: Intrapersonal skills; subcompet. Resilience


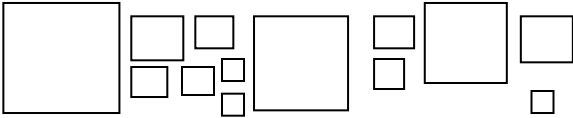
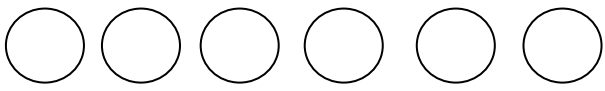
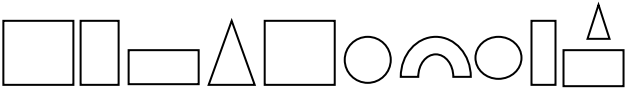
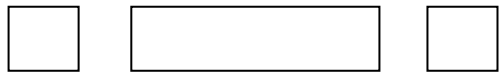
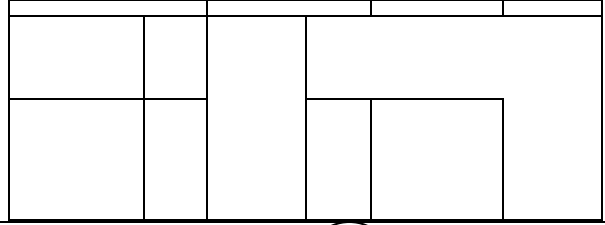
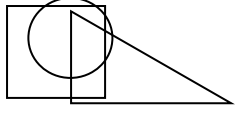
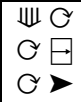

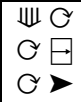

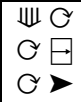

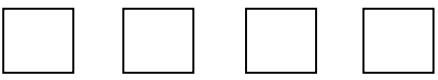
- Number of tasks solved



Co-funded by
the European Union


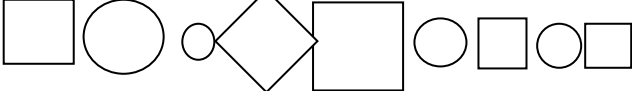
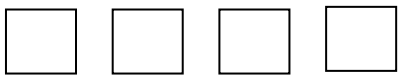
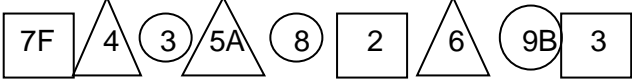

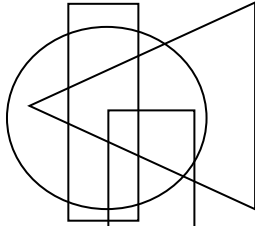
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

INSTRUCTIONS (participants):

Name		Age	Education												
Current position		Date													
1.	Draw a cross to squares that are bigger than this one: 														
2.	Write second letter of the alphabet to the second circle from the right:														
3.	Cross out all rectangles:														
4.	Write in the right square how many seconds a minute has and in the left square how many hours a day has:														
5.	Write the name of the capital of Austria in the largest box:														
6.	Write an eight in the space that is all in the circle, in the triangle, and in the square:														
7.	Make crosses in the rectangles under the boxes, where two or three of the marks are the same:	<table border="1"> <tr> <td></td> <td>W A O K X</td> <td></td> <td>A A O * 7</td> <td>* ⊕ V M 4</td> <td>OW O * O</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>			W A O K X		A A O * 7	* ⊕ V M 4	OW O * O						
	W A O K X		A A O * 7	* ⊕ V M 4	OW O * O										
8.	Cross out the word that has the most letters and circle the word that has the fewest letters:	DRINK - WOMAN - SHE - CAROL - PRAGUE													
9.	Write the correct answer to the question in the first square and the incorrect answer in the third square: How many months does a year have?:														
10.	Cross out the third, fifth and seventh digit in this row:	3 - 5 - 8 - 2 - 1 - 4 - 9 - 2 - 7													



Co-funded by
the European Union

11.	Make a horizontal line above the word, that does not denote money:	CROWN - PENNY - DIAMOND - CENT
12.	Cross out any number that is greater than 20 and less than 30:	34-79-56-25-87-68-82-47-27-31-64-93
13.	Cross out all words starting with O,M,U if they have less than five letters:	MY-OBITUARY-URGENT-ARAB-OLGA-ID-USE
14.	Write in the smallest square how many rings are in this row:	
15.	Write the smallest number in the largest of these squares, and the largest number in the smallest circle:	 8 6 5 9 7 3 6 2 4
16.	Circle all even numbers that are smaller than 37 and cross out all numbers greater than 83:	34-79-56-25-87-68-82-47-27-31-65-93
17.	Circle each number divisible by four, that is not greater than 40:	80-18-4-9-41-2-24-16-30-3-17-48
18.	Write the first letter of the day that follows Wednesday in the last square and the last letter of the day before Saturday in the first square:	
19.	Underline the names that refer to a profession:	SMITH-THATCHER-GREEN-NEWMAN-WHITE-RIDER-BROWN-TAYLOR-HARRIS
20.	Cross out all numbers that are smaller than 10 and greater than 5 provided they are not even:	2 - 8 - 12 - 7 - 6 - 4 - 9 - 3
21.	Note the words that have an even number of letters and those that have less than 4. Underline the latter and circle the former:	PERSON BAG LECTOR MUMMY BIT FREEDOM
22.	Cross out every even number that is not in a square and every odd number that is in a square with a letter:	
23.	Write a number in the last square, which, when added to the two given numbers, gives the correct answer to the question "How many months are in 2 years?":	 10, 11
24.	Write number 3 in all areas that are bounded by straight lines only:	



Co-funded by
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

25.	Cross out all even multiples of seven greater than 20:	7 - 38 - 49 - 14 - 28 - 54 - 35 - 42
26.	Underline the letter that is located in both the word duck and the word mustard.	m - b - u - i - v - k - d - f - t - n - y
27.	Connect the largest and smallest numbers with a line that runs under the number 3x larger than the smallest number and over the number 3x smaller than the largest number. You can draw around the others as you like.	7 9 4 3 5 6 2
28.	Underline all words referring to masculine persons:	PRIEST - DUKE - WIFE - LORD - LAD
29.	If there is more than one letter in the 3 words listed side by side that occurs in all of them, cross out every third letter of the second word. If not, underline all the vowels in the word that is a verb:	FELONY - BAGPACK- CONDOR
30.	The given names and surnames belong together in the following manner. When they are arranged alphabetically, the first given name pairs with the last surname. The second given name with the second last surname etc. Connect the alphabetically 3rd given name with the corresponding surname.	JOHN - ALEX - VINCENT- MARK- FRANK PARKER-TAYLOR-DIXON-LEWIS-MILLER



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



5-2b Intrapersonal skills – Resilience

Activity: “Math”

Primarily used to measure	Cl. 5: subcompet. Resilience

Secondarily used to measure	Cl. 4: subcompet. Flexibility and Adaptability

Group setting	individually
Time required	App. 15 min.
Aids	A4 paper sheets with prepared text samples

ACTIVITY DESCRIPTION

This is a purely individual activity that requires virtually no preparation, and can be executed both in an online and on-site AC/DC. The purpose of the activity is to compare the participant's performance without disturbances and his/her performance under stressful and distracting conditions.

Simple mathematical operations and equations are chosen for this exercise that do not require significant knowledge of math. Anyone should thus be able to calculate them. Furthermore, the same math examples are used for both parts of the activity to eliminate the possibility of different difficulty levels.

INSTRUCTIONS

Step 1 (5 min.):

The participants are handed out the first worksheet with the following equations and are given the following instructions: „Solve the equations. The activity stops when the first one of you completes the task.” The moderator measures the time and notes the time it took to for the first participant to finish the task.

10+4=	3+7=	19-6=	5x5=	4x7=	3x8=	1x78=	5+8=	7x3=	9-4=
4x2=	8-6=	34+7=	3-2=	8x4=	9-6=	8+4=	7x7=	4x4=	4x8=
15-8=	1x4=	20x2=	87-7=	8+7=	2x66=	34+6=	3+7=	5-4=	10-6=
23+7=	2+29=	18-5=	6+36=	10+6=	5-1=	30x3=	5-4=	65-5=	56-6=
18-6=	13-7=	3+7=	7x7=	6-2=	9+27=	4-2=	6+6=	4+16=	45+8=
12+7=	3x9=	5+9=	45-3=	5x3=	60-20=	2x9=	7+5=	5+5=	77-10=
15-4=	6+7=	9x6=	9x5=	7-5=	98-5=	31+9=	0+5=	9+16=	57-7=
7+6=	7x7=	5+5=	9+5=	49+6=	6x15=	7-4=	10x7=	6-3=	6+50=
6-3=	47-5=	7-2=	6x6=	70-3=	8x7=	57x2=	44-10=	7x8=	6+9=
9+25=	28+7=	49-7=	5-3=	4x9=	7+6=	8-4=	6x5=	9+55=	9-1=



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



The results matrix is included for easier evaluation:

14	10	13	25	28	24	78	13	21	5
8	2	41	1	21	3	12	49	16	32
7	4	40	80	15	132	40	10	1	4
30	31	13	42	16	4	90	1	60	50
12	6	10	49	4	36	2	12	20	53
19	27	14	42	15	40	18	12	10	67
11	13	54	45	2	93	40	5	25	50
13	49	10	14	55	90	3	70	3	56
3	42	5	36	63	56	114	34	56	15
36	35	42	2	36	13	4	30	64	8

Step 2 (5 min.):

The participants are handed out the second worksheet with the following equations and are given the following instructions: „Solve the equations. You have the same time as in the first round.” The moderator then announces the actual time and sets the timer.

The evaluators, however, does not let the participants work in silence. They may make look over the participant’s shoulders and comment on their work, may shuffle and make noises and otherwise distract the participants..

In the second half of the time limit, the evaluator announces 3rd minute, 4th minute, 4 minutes 30 seconds, 4 minutes 4 seconds, 40 minutes 50 seconds, 9 – 8 – 7 – 6 – 5 – 4 – 3 – 2 – 1 (*Results are provided for faster evaluation by the evaluator*).

9+25=	9-1=	7+6=	5-3=	8-4=	9+55=	49-7=	6x5=	28+7=	4x9=
12+7=	77-10=	60-20=	45-3=	2x9=	5+5=	5+9=	7+5=	3x9=	5x3=
7+6=	6+50=	6x15=	9+5=	7-4=	6-3=	5+5=	10x7=	7x7=	49+6=
15-8=	10-6=	2x66=	87-7=	34+6=	5-4=	20x2=	3+7=	1x4=	8+7=
10+4=	9-4=	3x8=	5x5=	1x78=	7x3=	19-6=	5+8=	3+7=	4x7=
4x2=	4x8=	9-6=	3-2=	8+4=	4x4=	34+7=	7x7=	8-6=	8x4=
18-6=	45+8=	9+27=	7x7=	4-2=	4+16=	3+7=	6+6=	13-7=	6-2=
23+7=	56-6=	5-1=	6+36=	30x3=	65-5=	18-5=	5-4=	2+29=	10+6=
15-4=	57-7=	98-5=	9x5=	31+9=	9+16=	9x6=	0+5=	6+7=	7-5=
6-3=	6+9=	8x7=	6x6=	57x2=	7x8=	7-2=	44-10=	47-5=	70-3=



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



The results matrix is included for easier evaluation:

34	8	13	2	4	64	42	30	35	36
19	67	40	42	18	10	14	12	27	15
13	56	90	14	3	3	10	70	49	55
7	4	132	80	40	1	40	10	4	15
14	5	24	25	78	21	13	13	10	28
8	32	3	1	12	16	41	49	2	32
12	53	36	49	2	20	10	12	6	4
30	50	4	42	90	60	13	1	31	16
11	50	93	45	40	25	54	5	13	2
3	15	56	36	114	56	5	34	42	63

Note: the work sheets may be printed two-sided on a single sheet of paper in which case it is important to mark the first and the second sheet.

Also this activity may be planned in two separate parts.... for example, the first step may take place after a coffee break, when the participants are rested, while the second step may take part just before the end of the program, or just before the lunch, when the participants may be tired or hungry to further increase their stress.

EVALUATION

The evaluators focus on the following observations that indicate the participants stress resilience.

They do so by focusing on:

(primary) Cluster 5: Intrapersonal skills; subcompet. Resilience

- Decrease in number of correctly solved equations in the second round (relatively to the first round).

(primary) Cluster 5: Intrapersonal skills; subcompet. Resilience

- Emotional reactions to the disturbances (intensity of emotional reactions).

(secondary) Cluster 4: Creativity and innovation; subcompet. Flexibility and adaptability

- Ability to quickly come up with an optimal approach to solving the equations for best results (e.g. solving first the simplest equations)



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



INSTRUCTIONS (participants):

1. Solve the equations. The activity stops when the first one of you completes the task.

10+4=	3+7=	19-6=	5x5=	4x7=	3x8=	1x78=	5+8=	7x3=	9-4=
4x2=	8-6=	34+7=	3-2=	8x4=	9-6=	8+4=	7x7=	4x4=	4x8=
15-8=	1x4=	20x2=	87-7=	8+7=	2x66=	34+6=	3+7=	5-4=	10-6=
23+7=	2+29=	18-5=	6+36=	10+6=	5-1=	30x3=	5-4=	65-5=	56-6=
18-6=	13-7=	3+7=	7x7=	6-2=	9+27=	4-2=	6+6=	4+16=	45+8=
12+7=	3x9=	5+9=	45-3=	5x3=	60-20=	2x9=	7+5=	5+5=	77-10=
15-4=	6+7=	9x6=	9x5=	7-5=	98-5=	31+9=	0+5=	9+16=	57-7=
7+6=	7x7=	5+5=	9+5=	49+6=	6x15=	7-4=	10x7=	6-3=	6+50=
6-3=	47-5=	7-2=	6x6=	70-3=	8x7=	57x2=	44-10=	7x8=	6+9=
9+25=	28+7=	49-7=	5-3=	4x9=	7+6=	8-4=	6x5=	9+55=	9-1=



Co-funded by
the European Union



2. Solve the equations. You have the same time as in the first round.

$9+25=$	$9-1=$	$7+6=$	$5-3=$	$8-4=$	$9+55=$	$49-7=$	$6\times5=$	$28+7=$	$4\times9=$
$12+7=$	$77-10=$	$60-20=$	$45-3=$	$2\times9=$	$5+5=$	$5+9=$	$7+5=$	$3\times9=$	$5\times3=$
$7+6=$	$6+50=$	$6\times15=$	$9+5=$	$7-4=$	$6-3=$	$5+5=$	$10\times7=$	$7\times7=$	$49+6=$
$15-8=$	$10-6=$	$2\times66=$	$87-7=$	$34+6=$	$5-4=$	$20\times2=$	$3+7=$	$1\times4=$	$8+7=$
$10+4=$	$9-4=$	$3\times8=$	$5\times5=$	$1\times78=$	$7\times3=$	$19-6=$	$5+8=$	$3+7=$	$4\times7=$
$4\times2=$	$4\times8=$	$9-6=$	$3-2=$	$8+4=$	$4\times4=$	$34+7=$	$7\times7=$	$8-6=$	$8\times4=$
$18-6=$	$45+8=$	$9+27=$	$7\times7=$	$4-2=$	$4+16=$	$3+7=$	$6+6=$	$13-7=$	$6-2=$
$23+7=$	$56-6=$	$5-1=$	$6+36=$	$30\times3=$	$65-5=$	$18-5=$	$5-4=$	$2+29=$	$10+6=$
$15-4=$	$57-7=$	$98-5=$	$9\times5=$	$31+9=$	$9+16=$	$9\times6=$	$0+5=$	$6+7=$	$7-5=$
$6-3=$	$6+9=$	$8\times7=$	$6\times6=$	$57\times2=$	$7\times8=$	$7-2=$	$44-10=$	$47-5=$	$70-3=$



**Co-funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.