

VET
Entrepreneurship
Curriculum/Course

Module 3
Assessment of
Entrepreneurial
Competencies
Unit 1-3



VETENTRE

Building VET Trainers Entrepreneurial Competences



Module 3: Assessment of entrepreneurship competences in VET

Unit 1: Possibilities and limits of observing entrepreneurial competencies.

1. Why assess entrepreneurial competencies?

- In order to assess learners and evaluate their competences
- in order for learners to become aware of their competences, skills and talents for further job and/or life orientation.
For example, when choosing an apprenticeship, further education or when applying for a job position or when changing jobs, it can be very useful to research skills and abilities.
- To identify competences with development potential
-> What skills could be refined to better fit specific job positions / market demand?

Trainer questions to VET teachers:

How could assessing entrepreneurial skills be beneficial for your learners?

Do you already apply assessment of entrepreneurial competencies in your courses? If so, please specify.

2. Possibilities of observing entrepreneurial competencies

In order to identify personal entrepreneurial competencies in learners, there are three fundamentally different methods of aptitude diagnostics, which in practice are also combined with each other:

1. trait-oriented procedures,
2. simulation-oriented methods and
3. biography-oriented procedures.

Trait-oriented procedures

In the context of a trait-oriented procedure, it is assumed that traits of persons are stable over time and decisively influence their behavior. These personality traits become behaviorally effective in very different contexts, for example also in work and start-up situations. To diagnose these personality traits, intelligence and personality tests, tests of attention and concentration, attitude, motivation and interest tests are used,

So for example, we can use:

- Personal SWOT-Analysis¹
A personal SWOT analysis is an analytical framework we can apply in assessing the performance of a learner. This is done by the learner to test him/herself and is classified into four sections:
Strength – talents, skill sets, capabilities, etc.
Weakness – personal areas that need improvement
Opportunity – possibilities where the learner can take advantage of, or where learner's talents, skills, and capabilities can flourish.
Threats – things that prevent learner from achieving his/her goals.

¹ Examples to be found here: <https://www.examples.com/business/10-personal-swot-analysis-examples.html>



- Personality tests²
There are multiple online tests/questionnaires, which help identify individual entrepreneurial skills and potentials.

Simulation-oriented methods represent the "major form" of competence diagnostics. Within the framework of work samples and assessment centers, realistic action situations are simulated as far as possible. In this way, they ensure that the content is strongly related to the world of work, occupation and life.

The learners are observed during the execution of the work samples/games and the accomplishment of realistic tasks in order to create an individual profile from the behavioral observations. We can use:

- Games/Role Plays³
- Assessment centers (discussed in more detail in this module)

Biography-oriented methods of aptitude diagnostics

When choosing this assessment method, interviews are conducted or application documents are analyzed in order to use behavior shown in the past "for predicting future behavior" (Schuler/Höft 2007, 310)⁴

Trainer questions to VET teachers:

What kind of observation assessment have you already applied in your class and how was your experience with the selected methods?

3. Observation bias

We all have biases. We all operate with mental models that place disproportionate weight on certain factors, which move our judgment in favour of one option compared to another.

Different observers may assess subjective criteria differently, and cognitive biases (including preconceptions and assumptions) can affect how learners are assessed.

When observing and evaluating pupils in practice, there are numerous factors, which can cause biases. In order for us to not fall into the trap of bias when observing and assessing our learners, we need to identify and then set aside biases in order to accurately evaluate learners' entrepreneurial skills.

Common biases include:

- Confirmation bias:
the tendency to search for or interpret information in a way that confirms one's preconceptions,

² German Entrepreneurship Personality Test: <https://gruenderplattform.de/unternehmen-gruenden/unternehmerpersoenlichkeit>

³ Examples of role plays:

<https://www.lewispalmer.org/cms/lib/CO01900635/Centricity/Domain/1731/2018%20Individual%20Role%20Play%20Events.pdf>

⁴⁴ https://www.joachim-herz-stiftung.de/fileadmin/Redaktion/Projekte/Wirtschaft/teacheconomy/Losleger/Losleger_Download_final_96dpi.pdf



- **Halo effect:**
Halo effect is “the name given to the phenomenon whereby evaluators tend to be influenced by their previous judgments of performance or personality.” The halo effect is the tendency for positive impressions of a person in one area to positively influence one's opinion or feelings in other areas. ⁵
- **Mirror bias:**
Mirror bias is the tendency to judge performance as “good” if it is “like I would have done it.”

For an assessment to be as objective as possible, assessment errors such as halo effects must be minimized. This is possible, for example, by sensitizing perception to the halo effect. The aim is to learn to better assess this source of error. Another countermeasure in the case of several people being assessed at the same time is to assess feature by feature, i.e. the first feature for each person being assessed, then the second, and so on. This prevents the teacher/assessor from being guided by an overall impression.

Another practical advice to overcome such biases is by correcting exams by "cross-correcting" them: Task 1 of all students is corrected first, followed by Task 2, and so on. This way, an exceptional performance (in a positive or negative sense) by a student on a single task has less effect on subsequent tasks to be corrected by the same student.

In addition, since time pressure in decision-making promotes the halo effect, a decision should not have to be made under time pressure.⁶

In order to mitigate the impact of these biases, observers can prepare themselves by asking themselves three questions⁷:

| When | What to ask yourself | What to do |
|-----------------------|--|---|
| Before an observation | <ul style="list-style-type: none"> • What preferences might I have regarding the learner/student I am about to observe? • Are there any biases I know of I am likely to fall into? | <ul style="list-style-type: none"> • Become aware of the biases and preferences and then mentally set them aside. |
| During an observation | <ul style="list-style-type: none"> • What are students doing and saying? • Assess students' performance according to specific criteria • Assess feature by feature | <ul style="list-style-type: none"> • Document objective evidence without interpretation of judgement |
| After an observation | <ul style="list-style-type: none"> • Can I draw a straight line between my determinations (e.g. strengths, growth areas, experiences) and objective student actions? | <ul style="list-style-type: none"> • Avoid getting caught up in a specific strategy that you would have used or have seen in the past. Stick with evidence captured during the lesson. |

⁵ <https://de.wikipedia.org/wiki/Halo-Effekt>

⁶ <https://de.wikipedia.org/wiki/Halo-Effekt>

⁷ <https://www.hendyavenue.com/avoid-observation-bias/>



4. Observation sheet, observer round and feedback

Each observer is given an observation sheet on which he documents in a structured form his observations of the behaviour of the participants assigned to him. For each part of the AC there is a separate sheet. The left column lists the entrepreneurial competencies as they are defined in the EntreComp Framework.

For the observation sheet see annex 1.

The observer round discusses the results and harmonises them. It is recommended to do the observation round right after the AC.

Promptly, preferably on the following day, the feedback to the participants should take place from the respective observer. The feedback rules must be taken into account.

There are four simple rules for giving effective feedback:

1. Be specific versus general.
2. Describe versus evaluate.
3. Focus on the behavior versus the person.
4. Maintain the relationship versus indulge in self-serving behavior.

Instructions for the exercises can best be found in the extensive literature on the training of soft skills. Here, the exercises are assigned to the respective competencies. You choose the competencies from the EntrComp framework and use the corresponding exercise now not for training but for observing the entrepreneurial competencies in the AC.

Unit 2: Description and examples of assessment methods

1. Assessment Centre

1.1. Definition and History

“Assessment Center is a process of evaluation of behaviour based on multiple evaluation. Assessment centres were applied for industrial usage. The first ones were developed in the early 1950s by Robert K Greenleaf and Douglas W. Bray of the American Telephone & Telegraph Company (AT&T). When this method spread over the world, guidelines were implemented in 1975. The most current version of the Guidelines and Ethical Considerations for Assessment Center Operations was endorsed by the 38th International Congress on Assessment Methods in Alexandria, Virginia in October 2014. Today, The ACM is used by organizations all over the world in both private and public sectors to better select of employees and identifying their development in different areas.”
Deborah E. Rupp, Brian J. Hoffman (2006), "History" (PDF), History of guidelines, Education and Praeger Publishers

“Today guidelines ensure the integrity of the process, the validity of the data, qualifications of assessors, and the rights of the participants. The last version of these guidelines were defined by the 38th International Congress on Assessment Methods in Alexandria, Virginia in October 2014.”
Aus: https://en.wikipedia.org/wiki/Assessment_centre



1.2. Example of an AC

Since in most European countries there is (still) no official school subject in which entrepreneurial competencies are taught, no assessment methods have yet been developed for this purpose. In some cases, a self-assessment of the learners is mentioned or the competence screening of the teacher during the lesson is recommended. This means that the teacher should continuously take notes on the individual learners with regard to the entrepreneurial competencies mentioned in the EntreComp framework. A uniform scale should be used for all students and observation documents should be noted for each assessment.

Entrepreneurial competences are only assigned to a small part of the category "knowledge" and therefore not only to be checked via the usual written grading procedures in schools, such as exams. So, if entrepreneurial competencies are to be taught in schools and an assessment is to be largely objectivized (for the observation bias see above) and documented with evidence, the method of the Assessment Center is suitable.

The method described here is taken from the professional context of the economy and is very innovative in the school context. Since entrepreneurial skills are sensibly taught predominantly in final classes, the additional benefit for the students is that they are already familiar with this method, which they may then encounter in application procedures.

In the transfer of the AC into the school context, there are 2 difficulties. On the one hand, the AC lives from the fact that there are several observers to reduce the influence of the observer bias. On the other hand, an AC in a professional context lasts about 1 day and is carried out with about 12 participants.

What possibilities are there to adapt this to the school conditions?

Observers can keep an eye on 2 to a maximum of 3 participants. That is why we propose for ACs in a school context to have 12 participants observed by 6 people. The 6 observers are e.g. 3 teachers and 3 students. This list must be adapted to the respective situation in the school.

Some days before the AC, observers and participants are informed what an AC is, what its goal is. Here it is particularly important to discuss the above-mentioned limits of an assessment of entrepreneurial competences and the observation biases.

For an assessment center you need a whole school day, i.e. usually 5-6 lessons. It is best to start with a playful exercise, such as the NASA space game, e.g. such as the NASA space game, to create a relaxed atmosphere for the rest of the process.

In the following chapters, a series of exercises are presented, which can then be put together to an AC as required. Here is therefore only an exemplary procedure that can be varied. For example a creativity exercise can also complement the AC or replace one of the other exercises.

| Duration | Exercise | Setting |
|----------|---------------|---|
| 60 min. | NASA exercise | Tables in block form, chairs for participants at the tables, chairs for observers in the outer circle. 1 flipchart for participants to work on. |
| 30 min. | Discussion | Chair circle for participants, chairs for observers in the outer circle |



| | | |
|---------|----------------|---|
| 45 min. | Case study | Individual workstations for participants, chair circle for all for the presentation of the results on the flipchart |
| 60 Min. | In-basket | Individual workstations for the participants |
| 60 Min. | Observer Round | Chairs and tables for the observers |

1.2.1. Games: NASA exercise

The authors of the game are not known. The game instructions are freely accessible in many books and on the Internet .

Here the following can be observed: what role in the group events does the participant take? How do they communicate? Are there participants who show leadership skills? How is the teamwork, how can the participant have an integrating effect or bring about decisions?

In the NASA exercise scenario, a group has landed on the moon and outside the spacecraft. The task of the players is to rank items that are on an issued list, with the item to be placed in the 1st place on the list, which is considered most important for the march to the mothership, and the second most important to the second place and so on. The least important item finally receives the rank 15.

The goal is to find the right ranking in both an individual solution and a team solution, which was actually developed by a team of experts from NASA and is considered a binding solution for this game.

According to the entrepreneurial competencies as they are defined in EntreComp, case studies can show in the AC the participants' competence in:

- 1.1 Spotting opportunities: Use your imagination and abilities to identify opportunities for creating value
- 1.2 Creativity: Develop creative and purposeful ideas
- 1.4 Valuing ideas: Make the most of ideas and opportunities
- 1.5 Ethical and sustainable thinking: Assess the consequences and impact of ideas, opportunities, and actions
- 2.3 Mobilizing resources: Gather and manage the resources you need
- 3.1 Taking the initiative: Go for it
- 3.2 Planning and management: Prioritize, organize and follow-up

Useful Resources: Here you can find the material for the NASA Exercise:

English:

[NASA Exercise: Ranking Survival Objects for the Moon – Association for Psychological Science – APS](#)

German:

[NASA-Spiel – Spielewiki](#)



1.2.2. Discussion

The setting and procedure for this part of the AC is as follows: The participants sit in the chair circle, the observers in the outer circle, so that the participants assigned to them have an eye on them. Participants are given a topic to discuss for 30 minutes.

It depends on the chosen topic which competencies are to be observed. It is also observable how a participant behaves in the discussion:

- does he/she actively participate?
- he/she is capable of dialogue
- he/she makes his/her own point of view clear
- how does he/she respond to the others
- ...

According to the entrepreneurial competencies as they are defined in EntreComp, discussions can show in the AC the participants' competence in:

- 1.3 Vision: Visualise future scenarios (depends on the chosen topic)
- 1.4 Valuing ideas: Recognise the potential an idea has for creating value and identify suitable ways of making the most of it
- 2.3 Mobilizing resources: Make the most of limited resources (depends on the chosen topic)
- 2.4 Financial and economic literacy (depends on the chosen topic)
- 3.3 Coping with uncertainty, ambiguity, and risk (depends on the chosen topic)

1.2.3. Case Study

Besides teaching and assessment situations case studies play an important role as (qualitative) research methods e.g., in medicine and management theory. Case studies can be used here to form theories. These studies report on how a specific problem was solved and what decisions were made along the way. These can be positive but also negative cases. Case studies are also used in marketing, e.g. when a company talks about the effect of its products in concrete cases or about its corporate culture.

From this, three important factors of a case study become clear:

1. a concrete problem is needed, which is told
2. (storytelling) including the framework conditions and decisions up to the
3. solution

Case studies require a precise analysis of the topic concerned as well as a precise strategy for solving the 'case' and include the presentation of pros and cons as well as the recommendation or presentation of the best possible solution. Often the connection between case and context is not clear or not all information is accessible for the participant.

Most cases have these common elements:

- A decision-maker who is grappling with some question or problem that needs to be solved.
- A description of the problem's context (a law, an industry, a family).
- Supporting data, which can range from data tables to links to URLs, quoted statements or testimony, supporting documents, images, video, or audio.



The participants receive several documents describing the case and delivering additional information including numbers and descriptions of the context. A business idea and some information about the context are given and the participants' task is either to create a pitch or to outline a business plan.

Complexity can be increased by including unnecessary information. This strengthens the competence to distinguish the essential from the insignificant.

Participants have 30 -45 minutes time to read the case and prepare their presentation with a proposed solution. Afterwards each participant presents his solution in front of the observers. The observers will ask questions.

Examples: A case study in which a company and its product, which is to be newly introduced, are presented. The person responsible is faced with the decision whether advertising should be placed in print media or only advertised via digital media. Depending on the level of the learners, information about the product and numbers, data are given to the learners.

Useful/Practical Tip:

Good case studies you do not have to shop, you can write them yourself. Excellent sources for this are experiences from your own environment, scientific case studies from the Internet or stories that companies tell about themselves and their products.

According to the entrepreneurial competencies as they are defined in EntreComp, case studies can show the participants' competence in:

- 1.3 Vision: Visualise future scenarios to help guide effort and action
- 1.4 Valuing ideas: Recognise the potential an idea has for creating value and identify suitable ways of making the most of it
- 2.3 Mobilizing resources: Get and manage the material, needed to turn ideas into action. Make the most of limited resources.
- 2.4 Financial and economic literacy
- 3.2 Planning and management
- 3.3 Coping with uncertainty, ambiguity, and risk

Useful Resources: On these webpages you can find a collection of case studies.

English:

- <https://www.speakhr.com/category/case-study/>
- https://www.academia.edu/21954348/A_Case_Study_in_Entrepreneurship_Small_Business_Set_Up
- <https://guides.library.utoronto.ca/entrepreneurship/casestudies>

German:

- <https://www.e-fellows.net/Karriere/Branchen-Beratung-und-IT/Fallstudie/Fallstudien-Beispiel>
- <https://www.e-teaching.org/lehrszenarien/pruefung/pruefungsform/fallstudien>

1.2.4. Role Play:

Preparatory Phase



At the beginning of a role play, the teacher introduces the game situation by describing the fictional scenario:

- What is it about?
- What is the motivation/ goal to be achieved in the game?
- What are the problems?
- Which rules of the game do players and observers have to adhere to?

When the setting and the rules are clear to everyone, the teacher distributes the different roles, and the players prepare for their roles with the help of role cards. If the game is carried out in multiple rounds, learners can change their roles.

Implementation phase

There are many roles and conflicting constellations that are suitable for role-play in entrepreneurship assessment. Examples include entrepreneur and customer, founder and bank consultant, entrepreneur and venture capitalist or competing companies.

Game situations can be, inter alia: organising production processes, market a business idea or product, negotiating loans with the bank. The subject matter is not the main focus. It is primarily about the different perspectives from which the presented problems are seen, assessed and dealt with.

The game takes place in certain turns. The role-play ends either after a previously agreed time or after an evaluable result has been achieved.

Preparing Role Playing Games

Prepare the game: You can either write your own role-playing games or use one of the many to be found on the internet (see some links in the box on the next page). If you use an existing one, make sure you familiarise yourself with it and memorise the game structure and the guiding questions for the evaluation round. The games during which calculations are being used most often need some practice beforehand.

Prepare your material: most games need some tools (like scissors, markers etc.) or some products to play with. Also, it might be good to display the rules of the game or any other important information on the flipchart.

Prepare role cards: on role cards, individual persons (game roles) are described. They can contain information like: Name and occupation, age, marital status, children, etc.; Information on the context of the role (professional situation); Information about views and opinions etc.

Prepare the classroom: Let learners sit in a circle with no tables instead of sitting at individual tables. This supports a vivid discussion after each round of action. Also, it helps to rearrange the classroom for group work or action phase quickly.

According to the entrepreneurial competencies as they are defined in EntreComp, the role play can show the participants' competence in:

1.3 Vision: Visualise future scenarios to help guide effort and action

1.4 Valuing ideas: Recognise the potential an idea has for creating value and identify suitable ways of making the most of it



- 2.3 Mobilizing resources: Get and manage the material, needed to turn ideas into action.
Make the most of limited resources.
- 2.4 Financial and economic literacy
- 3.2 Planning and management
- 3.3 Coping with uncertainty, ambiguity, and risk

Useful Resources

On these webpages you can find a collection of role-playing games and energizers:

English:

- <https://www.lewispalmer.org/cms/lib/CO01900635/Centricity/Domain/1731/2018%20Individual%20Role%20Play%20Events.pdf>
- <https://sixth.ucsd.edu/files/home/student-life/icebreakers-teambuilding-activities-energizers.pdf>

German:

- <https://bildung.vonmorgen.org/category/methoden/spiele/planspiele/>
- https://lehrerfortbildung-bw.de/u_gewi/wirtschaft/gym/bp2004/fb1_2/06_sim/plan/uebersicht_spiele_und_simulationen.pdf



Further Resources

English:

R. W. Scholz, D. J. Lang, A. Wiek, A. I. Walter und M. Stauffacher: Transdisciplinary Case Studies as a Means of Sustainability Learning. Historical Framework and Theory. In: International Journal of Sustainability in Higher Education. Voume 7, Nr. 3, 2006, S. 226–251.

Davis A. Garvin: Making the Case. In: Harvard Magazine. Heft 106, 2003, S. 56 ff.

EACEA, 2021. 3.8 Development of entrepreneurship competence. [Online]

Available at: <https://eacea.ec.europa.eu/national-policies/en/content/youthwiki/38-development-entrepreneurship-competence-cyprus>

Jean Barbazette: Instant Case Studies: How to Design, Adapt, and Use Case Studies in Training. Pfeiffer; Pap/Cdr Edition, 2003

Lackéus M.: Entrepreneurship in Education. What, Why, When, How Entrepreneurship360 Backgroundpaper. OECD 2015. https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf

Zahra Arasti, A Study of Teaching Methods in Entrepreneurship Education for Graduate Students, March 1, 2012; URL: <http://dx.doi.org/10.5539/hes.v2n1p2>, doi:10.5539/hes.v2n1p2

German:

Franz-Josef Kaiser: Grundlagen der Fallstudiendidaktik – Historische Entwicklung – Theoretische Grundlagen – Unterrichtliche Praxis. In: Franz-Josef Kaiser (Hrsg.): Die Fallstudie – Theorie und Praxis der Fallstudiendidaktik. Band 6, Bad Heilbrunn, 1983, S. 9–34

Franz-Josef Kaiser und H. Kaminski: Methodik des Ökonomie-Unterrichts. Grundlagen eines handlungsorientierten Lernkonzepts. Bad Heilbrunn 1999

Peter Heimerl und Oliver Loisel: Lernen mit Fallstudien in der Organisations- und Personalentwicklung. Anwendungen, Fälle und Lösungshinweise. Linde, Wien 2005.

Michael Bannach: Selbstbestimmtes Lernen. Baltmannsweiler 2002, S. 141ff.

Arasti, Z., Falavarjani, M. K. and Imanipour, N. (2012). A Study of Teaching Methods in Entrepreneurship Education for Graduate Students, *Higher Education Studies*, 2 (1). doi:10.5539/hes.v2n1p2

1.2.5. In-basket exercise

The in-basket exercise provides information about the following characteristics of the participants, like:

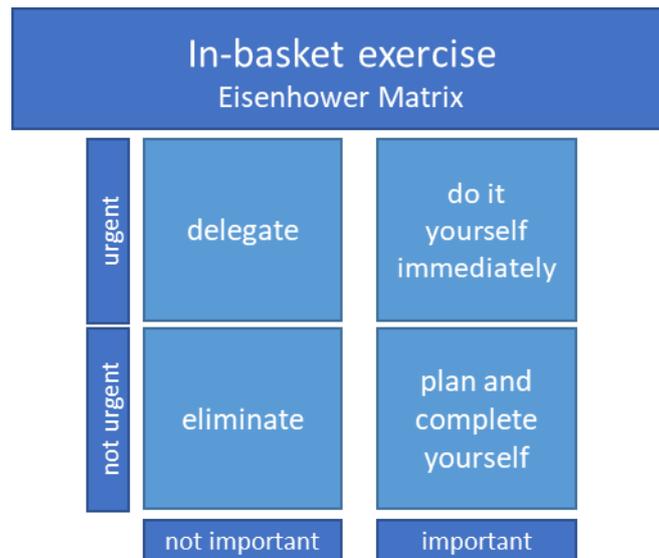
- Reaction in stressful situations
- Ability to think analytically



- Solution-oriented or problem-oriented way of working
- Willingness to make decisions and the will to make a delegation
- Concentration

The participants of an in-basket exercise receive a mailbox that receives documents and receipts from different business areas. These include e.g., account statements, incoming invoices from suppliers and unpaid outgoing invoices. In line with the digital transformation, a mailbox also contains e-mails from customers, electronically transmitted instructions from superiors, but also private matters. Candidates must decide within a fixed period of time (often 60 minutes) which documents they give which priority and justify this decision.

Often additional pressure is exerted by providing too many documents for the given time. So not



everything can be read thoroughly before the decision is made.

After the exercise, the individual interviews (follow-up interviews) with the candidates take place. Here, candidates must explain why, for example, they gave a customer's request a higher priority than an unpaid invoice.

Maybe the participants already know to use a matrix like the following to structure their work on the in-basket exercise:

Typical cases of inbox exercise:

- His own child had an accident at school.
- The birthday of the managing director must be organized.
- The secretary wants a raise.
- An important material delivery does not arrive as agreed.
- A production machine has failed. The production process was stopped immediately.

So, there is a scenario that the future entrepreneur can find concretely. It is a mixture of private and professional challenges.

Tip: Also allow solutions that deviate from the standard solution. What is important is how the students argue for them.

According to the entrepreneurial competencies as they are defined in EntreComp, the in-basket exercise can show in the AC the participants' competence in:



- 1.5 Ethical and sustainable thinking: Assess the consequences and impact of ideas, opportunities, and actions
- 2.3 Mobilizing resources: Gather and manage the resources you need
- 3.2 Planning and management: Prioritize, organize and follow-up

Useful Resources: Here you can find the free download of the in-basket exercise and the corresponding solution:

English:

<https://www.assessmentday.co.uk/in-tray-exercise.htm>

German:

<https://docplayer.org/513836-Uebung-postkorb-2-postkorbuebung.html>

Useful Resources: Resources for the whole AC:

English:

<https://www.cvcorrect.com/blog/the-five-most-common-exercises-at-an-assessment-center/>

<https://www.assesshub.com/9-assessment-centre-exercises-practical-steps-select-right-combination/>

German:

<https://www.absolventa.de/karriereguide/ac-hilfe/assessment-center-uebungen>

<https://karrierebibel.de/assessment-center/>

Useful Resources Descriptions and materials for exercises:

English:

<https://www.sessionlab.com/library>

German:

Klaus Antons, Heidi Ehrensperger, Rita Milesi: Praxis der Gruppendynamik. Göttingen, Toronto, Zürich 2018. Hogrefe Verlag.

3. Written exam

A written test on theoretical questions of entrepreneurial competences can be quite useful. In this way, the learners can once again be made aware of what entrepreneurship means and that this is not only helpful for future self-employed people who want to start a business. Entrepreneurial skills ultimately enable the students to lead a self-determined, successful life in which they create added value for themselves and their environment.



The written exam is the instrument commonly used in school context. Two exercises from the AC can be done in an written exam as well: the case study and the discussion. Obviously the case study can be solved by the learner in individual work and the solution can be put down in writing. The topic of a discussion can be given the topic can be given as an assignment in the form of an essay.

Possible questions for a written test are:

- Please describe the definition of entrepreneurial competencies.
- Name at least 3 entrepreneurial competences and give an example how these competencies can be realized.
- Why entrepreneurial competencies are important in employed positions?
- Give an example how apprentices can show entrepreneurial competencies.
- Give at least 3 examples of business ideas.
- What is a business plan?
- What is meant by a pitch?

4. Tests

Psychometric tests are usually questionnaires by means of which personality traits of a subject are compared with the average values of a standard sample.

However, it should be borne in mind that there is a difference between personality traits and competencies. Personality traits can hardly be developed or trained, they are developed through biography. Competences, on the other hand, do. Competencies are the abilities of a person to act self-organized and creatively in previously unknown or unexpected situations. However, personality traits are the basis or even the limiting factor for the development of competences. So it is interesting to know them in order to recognize which entrepreneurial skills are worth training and which are unlikely to become the strength of the subject.

Useful Resources: Here links to some personality tests

English:

HBDI: <https://www.thinkherrmann.com/>

DISC: <https://www.discprofile.com/>

Big Five: <https://bigfive-test.com/test>

LIFO: <https://www.lifeorientations.com/>

German:

HBDI: <https://hbdi.de/>

DISG: <https://www.disg-modell.de/>

Big Five: <https://www.big-five-modell.de/>

LIFO: <https://www.lifoproducts.de/>



Unit 3: Comparing those methods regarding their possibilities and limits

In the previous unit 3 methods for assessing entrepreneurial competences were presented: Assessment Center (AC), written exam, standardized tests. All of them have their possibilities and challenges.

Assessment Center (AC):

Possibilities:

- Opportunity to observe the behaviour of learners in situations simulating entrepreneurial challenges.
- Observations from several observers per participant can be gathered
- Feedback to concrete behaviour of participants can be given
- The exercises can be adapted to individual needs
- An AC is not only an assessment tool, but the exercises are at the same time a training of entrepreneurial skills
- Additionally, the implementation of an AC in school lesson prepares the pupils for being successful in AC when they are applying for a job after school, because some companies select their candidates using this method.

Challenges:

- Planning and implementation of an AC is quite work intensive and time consuming
- The limited resources in schools must be solved: limited time and observers.
- Observers must be trained
 - o to be aware of their observation biases
 - o to evaluate concrete observable behaviour and not the interpretation of what they observe
 - o to give constructive feedback
- Results of an AC is feedback to the pupils and making grades out of it for a school report is not easy

Written exam:

Possibilities:

- Opportunity to test the knowledge of the students about entrepreneurial competencies, how they are defined, how they can be developed
- Raising awareness about the advantages of entrepreneurial competencies
 - o for a successful life
 - o for giving positive impact to society
- The pupils can reflect their thoughts about entrepreneurship by writing essays
- Schools are used to evaluate pupils by written exams, they fit into the actual school system and grades are easily to create.
- Easy to implement

Challenges:

- Only knowledge and Thoughts can be evaluated



- Behaviour can't be evaluated

Standardized tests

Possibilities:

- Easy to implement, not time consuming
- The tests are standardized and validated (more or less)
-

Challenges:

- Each test is associated with costs.
- The pupils shouldn't be too young. Minimum 16 years old or even better 18.
- The results should be interpreted and given to the pupils by a trained person

In summary, we recommend performing an AC, whether in the long form or in a shortened version. It makes teaching livelier and more innovative. An exam can be carried out in addition because knowledge and reflection on entrepreneurial competencies are also very important. The grades, if required, can be generated from the exam, and the results of the AC can be included.

The performance of one of the standardized tests is not necessary for school purposes. It might be a service for the final classes for the later career of the students.



Annex 1: Literature:

English:

Bacigalupo M; Kampylis P; Mccallum E; Punie Y. Promoting the entrepreneurship competence of young adults in Europe: Towards a self-assessment tool. 9th annual International Conference of Education, Research and Innovation; The International Academy of Technology, Education and Development (IATED) (Organiser). The International Academy of Technology, Education and Development (IATED); 2016. p. 611-621. JRC103263

[PROMOTING THE ENTREPRENEURSHIP COMPETENCE OF YOUNG ADULTS IN EUROPE: TOWARDS A SELF-ASSESSMENT TOOL - IATED Digital Library](#)

German:

Marisa Kaufhold: Kompetenz und Kompetenzerfassung: Analyse und Beurteilung von Verfahren der Kompetenzerfassung. Wiesbaden 2006.



Annex 2: Observation Sheet

Exercise:

Name of Participant:

| Competence area | competencies | observations | observable actions and arguments of the participant |
|-------------------------|------------------------|--------------|---|
| Ideas and opportunities | Spotting opportunities | | Identifies and seizes opportunities to create value by exploring the social, cultural and economic land scape in the situation described. Identifies needs and challenges that need to be met Establishes new connections and brings together scattered elements of the landscape to create opportunities to create value |
| | Creativity | | Develops several ideas and opportunities to create value, including better solutions to existing and new challenges. Explores and experiments with innovative approaches. Combines knowledge and resources to achieve valuable effects |
| | Vision | | Imagines the future. Develops a vision to turn ideas into action. Visualises future scenarios to help guide effort and action. |



VETENTRE

| | | | |
|-----------|----------------------------------|--|--|
| | Valuing ideas | | Judges what value is in social, cultural and economic terms. Recognises the potential an idea has for creating value and identifies suitable ways of making the most out of it. |
| | Ethical & sustainable thinking | | Assesses the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment. Reflects on how sustainable long-term social, cultural and economic goals are, and the course of action chosen. Acts responsibly. |
| Resources | Self awareness & self efficiency | | Reflects on his/her needs, aspirations and wants. Identifies and assess your individual and group strengths and weaknesses · Believe in your ability to influence the course of events, despite uncertainty, setbacks and temporary failures |
| | Motivation & perseverance | | Is determined to turn ideas into action and satisfy the need to achieve. Is prepared to be patient and keeps trying to achieve long-term individual or group aims. Is resilient under pressure, adversity, and temporary failure |

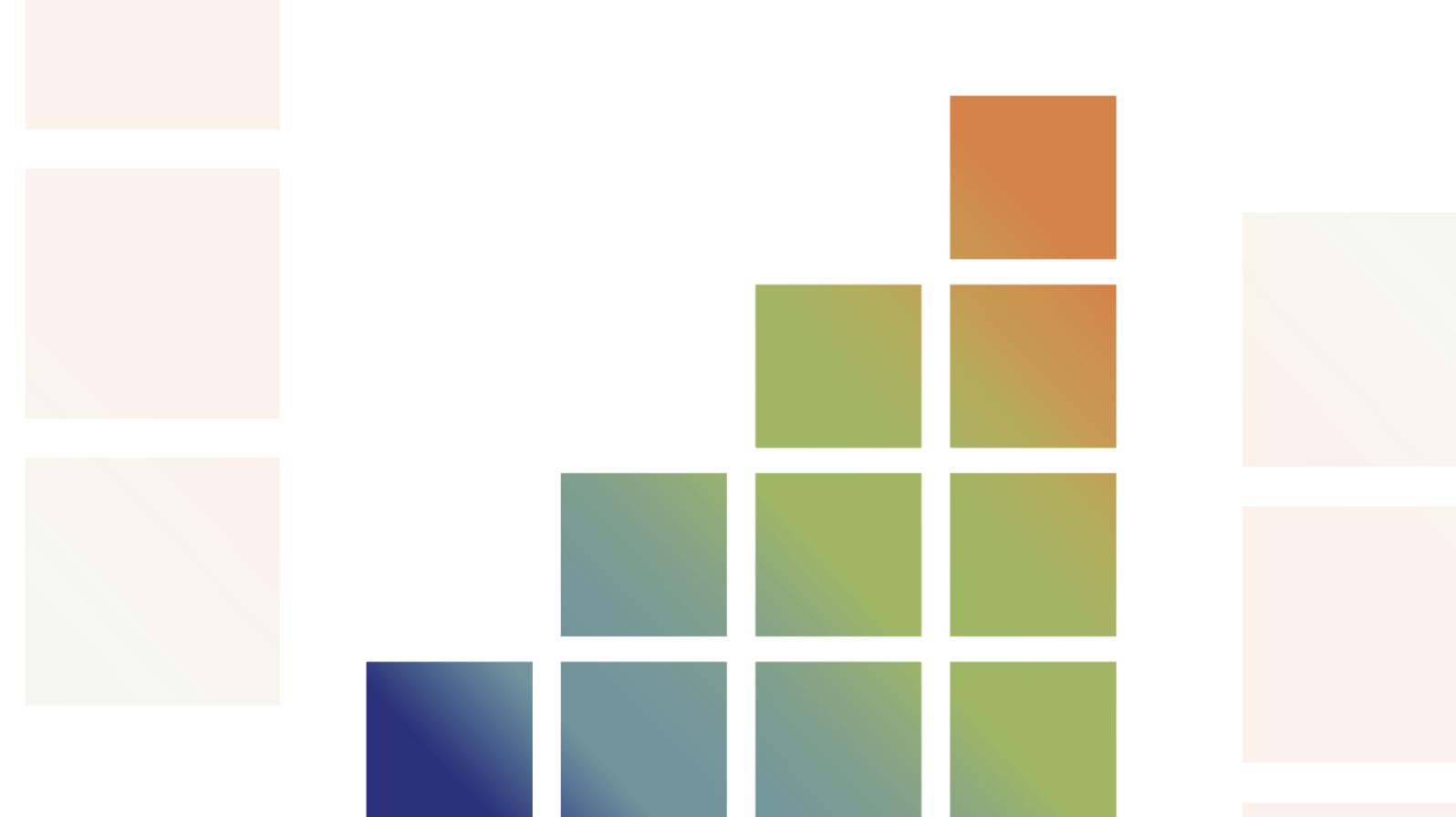


VETENTRE

| | | | |
|-------------|-------------------------------|--|--|
| | Mobilizing resources | | Gets and manages the material, non-material and digital resources needed to turn ideas into action · Makes the most of limited resources · Gets and manages the competences needed at any stage, including technical, legal, tax and digital competences |
| | Financial & economic literacy | | Estimates the cost of turning an idea into a valuecreating activity · Plans puts in place and evaluates financial decisions over time · Manages financing to make sure his/her value-creating activity can last over the long term |
| | Mobilizing others | | Inspires and enthuses relevant stakeholders · Gets the support needed to achieve valuable outcomes · Demonstrates effective communication, persuasion, negotiation and leadership |
| Into action | Taking initiative | | Initiates processes that create value · Takes up challenges · Acts and works independently to achieve goals, sticks to intentions and carries out planned tasks |



| | | | |
|--|---|---|--|
| | Planning & management | x | Sets long-, medium- and short-term goals · Defines priorities and action plans · Adapts to unforeseen changes |
| | Coping with ambiguity, uncertainty & risk | | Makes decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes · Within the value-creating process, includes structured ways of testing ideas and prototypes from the early stages, to reduce risks of failing · Handles fast-moving situations promptly and flexibly |
| | Working with others | | Works together and co-operates with others to develop ideas and turns them into action · Networks · Solves conflicts and faces up to competition positively when necessary |
| | Learning through experience | | Uses any initiative for value creation as a learning opportunity · Learns with others, including peers and mentors · Reflects and learns from both success and failure (own and other people's) |



VETENTRE

Building VET Trainers Entrepreneurial Competences



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