Teacher Didactics Guide

Geo Circle

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More information
www.geo-circle.eu
www.ivn.nl/jongeren

Educational design & training
Bert Colly
Kees Siderius
groningen@ivn.nl

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Introduction

The aim of future-oriented education via the GEO-CIRCLE Project is to stimulate pupils to research present-day social issues and to think in possibilities rather than obstacles.

The GEO-CIRCLE Project is not just future-oriented, it is also about close cooperation between secondary schools in The Netherlands, Germany, Czech Republic, corporate life, social institutions and local or regional government and municipalities. It is a framework for interdisciplinary studies, combining knowledge from various school subjects and creating an environment in which students can differentiate and use higher order thinking skills (HOTS) as well as 21st century skills.

The GEO-CIRCLE project connects with current developments in the field of education of countries involved and builds on GEO-WATER project experiences. In terms of organisation and didactics, these experiences are based on the method described in the GEO-WATER Guidelines and the Teacher Handbook.

GEO-CIRCLE learning experience@school uses the Storyline Approach, ten generic study skills and 8-C key competences of international education.

In the Netherlands, this project fits in the category of 'extended education'. Learning should not be limited to a minimum number of hours spent at school but should also take place in the field through a series of educational activities outside the curriculum (field research). Our GEO-CIRCLE project is a practical realisation of new theoretic developments in the field of education and therefore offers a unique instrument for these renewed teaching opportunities to be implemented.

The GEO-CIRCLE project encourages excellency and talent development of young people by means of solving sustainability problems in relation with circular economy issues. With the help of associated partners from industry, government and education these current issues will be translated in GEO-CIRCLE modules and 'real-life' questions. Working this way promotes active student participation and challenges them to think and work in a goal-driven, creative and flexible way.

Storyline Approach

The didactics of Storyline Approach is applied within the GEO-CIRCLE Project.

Storyline Approach is not something of recent times. The didactics was first used in Scotland some thirty years ago when Steve Bell and his colleagues came up with the first concept, the "Storyline Approach to Education". Erik Vos introduced the didactics in the Dutch primary education and the elementary school teacher training colleges. Since 1996 the didactics is being used in secondary education and in teacher training colleges.

The Storyline Approach always works from the concept of a story. The story provides the context in which the students practise their learning activities. Characteristic to the Storyline Approach is the involvement the didactics evokes in students. The activating working method challenges them to make their own contribution. After all, the answers are not written in reference books, but students will have to rely entirely on their own research in their own environment. From authentic sources and contacts with real experts, young people will develop an exploratory approach in relation to the subject. Students become motivated, have an entrepreneurial attitude and are proud of their work.

Within the GEO-CIRCLE Project curriculum, the didactics of the Storyline Approach gives the learning process a large dose of 'authenticity'. That is because each project revolves around a real assignment from a real client. The assignments are contemporary and are always set within a social context. Support from real experts encourages young people to explore society outside the familiar realm of the school. They get in touch with various people, recognise the different interests people have in the subject matter, and subsequently draw their own conclusions.

Since students are in contact with the real world within the project, they learn to apply various skills and competences and to further develop the 8-C competences as mentioned below.

Ten generic study skills

The choice for the ten generic study skills mentioned below is based on literature search done by Harbers. These ten skills have been further elaborated when drawing up the GEO-CIRCLE learning experience@school project. Harbers researched which study skills mentioned in literature are relevant for study success. To his list, we have added the skill "research" because this skill will play an important role within the GEO-CIRCLE Project.

The ten generic study skills are:

- Planning, and working independently
- Looking up and processing of information
- Reading and learning of texts
- Co-operating
- Analysing
- Use of ICT
- Researching
- Reporting
- Presenting
- Reflecting

In the supplement attached to this GEO-CIRCLE learning experience@school document the ten generic study skills are explained via:

-Sub-skills and techniques,

-Desired behaviour of pupils/students,

-Getting started as an individual teacher,

-Getting started as a team/department

https://www.vo-ho.nl/studievaardigheden-havo-hbo/

8-C key competences

In the GEO-CIRCLE Project the 8-C Key competences described by Ken Robinson play a role throughout the project. Below is a short description of these competences.

CURIOSITY: The ability to ask questions and explore how the world works

Remember when all we hear in the classroom is the teacher's voice because we were told to keep quiet the whole time? The learning process is a 2-way street. Encouraging learners to ask questions in the classroom, deepens their curiosity and makes them more engaged in the topic being discussed.

CREATIVITY: The ability to generate new ideas and to apply them in practice

The most often downloaded and watched TEDTalk is Sir Ken Robinson's "How Schools Kill Creativity". Let's be part of the statistic and watch it because this sums it all up..

CRITICISM: The ability to analyze information and ideas and to form reasoned arguments and judgments

Schools should focus more on critical thinking rather than collecting information. Robinson says that they should be data-driven and not data-informed. Kids these days are in the middle of information explosions. They are bombarded with so much information online and even offline. They need to strengthen their critical thinking to know how to make use of these data, how to incorporate it correctly in their lives and how to determine the truth from fallacy.

COMMUNICATION: The ability to express thoughts and feelings clearly and confidently in a range of media and forms

Children should be able to communicate their thoughts and express their feelings well. They should also be allowed to express it not just in written and verbal form but also in other media like the arts, dance, theater, etc.

COLLABORATION: The ability to work constructively with others

Children are social beings and an important skill is for them to be able to work/play well with others. Bouncing off ideas with one another not only strengthens their social domain, but also encourages good communication and critical thinking.

COMPASSION: The ability to empathise with other others and act accordingly

Major behavioral problems like bullying, prejudices, and violence stem from the inability of a child to empathize with others. Together with Collaboration, schools should have a culture of Compassion all the way from teachers being able to understand the plight of their students up to students being sensitive to the needs of the people around them. Often Conduct is only based on how the child behaves in the classroom, during class. But Conduct is how a child conducts himself whether the teacher is looking or not.

COMPOSURE: The ability to connect with the inner life of feeling and develop a sense of personal harmony and balance

There are many cases these days of children going through depression, anxiety and severe stress. Children need to develop not only compassion for others but also compassion for themselves. Schools focus more on the outside world when there is an inner world that kids dwell in daily which is built by their ability to control, understand and connect their feelings with what is going on around them. Socio-emotional development should be as important as cognitive development which is why schools should have programs that encourage kids to digress, step back, assess and express how they feel.

CITIZENSHIP: The ability to engage constructively with society and to participate in the processes that sustain it

The progressive theorist John Dewey said, "Democracy has to be born anew every generation, and education is its midwife." Children should be sensitive to the current events of the world around them be able to understand and have an opinion on their rights, on the responsibility of government and the laws that protect them. Schools should not just talk about this in Social Studies but rather develop a sense of citizenship (not necessarily conformity) and love of country.

Ken Robinson, "Creative Schools: The Grassroots Revolution that's Transforming Education"

https://youtu.be/iG9CE55wbtY

GEO-CIRCLE Procedure: modules and 'real-life assignment'

The modules of the GEO-CIRCLE Project, which are designed to challenge students to get the best results, are of great relevance in relation to the success of the GEO-Projects concept. When developing these modules, which is a daunting task, one is faced with many decisions.

First of all, the circular economy theme. The GEO-CIRCLE Project chose five reciprocally connected main themes: raw materials streams, energy transition, biotic and abiotic cycle, recycling und upcycling and modular design.

After that, each school and subject teacher must look for suitable associated partners with whom those main themes will be further developed.

Within the GEO-CIRCLE Project, the associated partners are local government, municipalities, corporate life, and other knowledge institutions.
The task of the associated partners is to provide input based on the current situation, the writing of the actual modules is merely a task for the main school partners involved and subject teachers, as well as IVN - *Instituut voor Natuureducatie en duurzaamheid* (an institution for nature education and sustainability)

Procedure

How do you continue with the main theme once you found your targeted associated partner(s)?

The first step is to formulate the goals you want to achieve: what do students need to know, realise and manage at the end of each module?

The second step is formulating the final assignment. This is what will be presented as a 'real- life assignment' at the start of one or more modules.

The starting point of the GEO-CIRCLE Project is a scaffolding in comprehension levels based on the Storyline Approach, ten generic study skills and 8-C key competences. At this point, more attention should go to lower-order thinking skills such as: identification, comprehension and application.

All modules must be close to the pupils' experiences (regional setting). Gathering information by students themselves can contribute to that greatly. In this way students get a knowledge-base on which they can build during the modules resulting in the usage of higher- order thinking skills such as analysing, evaluating and creating.

In the final assignment, all skills will be addressed. Students, for example, will be able to make a design, put together a problem analysis, or plan out solution strategies. They also present their final assignment in which they try to convince the client of their solution.

Each module should have an excursion to one of the partners (companies, knowledge institutes, etc.) which play a role in that particular module.

GEO-CIRCLE learning experience@school

The basis of the **GEO-CIRCLE learning experience@school** was laid during the execution of the GEO-WATER Project (2015-2018). The Storyline Approach as a didactic tool was introduced at that time (See GEO-WATER Teacher Handbook).

In the GEO-CIRCLE Project, we also choose for the Storyline Approach with a consultancy in the leading role. One or more consultancies are formed. The business is given a name, a logo is developed, business cards are designed, and the students are designated certain tasks within the consultancy. Each student is playing a role within the consultancy and research. Mutual coordination and consultation is essential to come up with sound recommendations for the client.

At this point (coordinators meeting/april), we will further elaborate on how the Storyline Approach, the 10 generic study skills and the 8-C competences are intertwined within the GEO-CIRCLE learning experience@school. At the same time, we will make use of materials and experiences from the GEO-WATER project.
As an ongoing process, information will continually be added to the **GEO-CIRCLE learning experience@school concept**. This is done based on practical experiences and feedback from the main and associated partners involved.
On June 12, 2020 the final version of the **GEO-CIRCLE learning experience @school** method will be presented during the closing ceremony of the International GEO-CIRCLE Conference in Leeuwarden.

GEO-CIRCLE learning experience@school step-by-step

When planning the GEO-Projects, the basis was laid during the implementation of the GEO-WATER Project, resulting in our Planning Guidelines.

In the preliminary phase of the GEO-CIRCLE Project, the broad outlines of the project were formulated in April 2018, during a student conference. In September 2018 these broad outlines were further elaborated during a teachers' meeting in Neratovice.

Prior to the carrousel-exchanges (December 2018 through May 2019) among the partner schools, the following projects steps have already been taken:

-Choice of Theme: raw materials streams, energy transition, biotic and abiotic cycle, recycling and upcycling, and modular design

-Choice of associated partner(s):   local government, municipalities, corporate life, knowledge institutions, as experts

-Objectives: formulate with regards of theme chosen

-Modules: design/create/write

-Real-life assignment: formulate

Supplement: Explanation ten generic study skills

1. Planning and working independently

Sub-skills and techniques	Desired behaviour of student
Taking responsibility	Bears responsibility for results of own work and study
Inventory of tasks	Finds out what needs to be done
Realistic time planning for shorter and longer term in correct order	Makes weekly schedules and longer term planning and makes a reasonable estimate of the time required
Deadlines and recording results	Includes in the planning when something needs to be finished
Working according to schedule	Sticks to the schedule, works according to plan in correct order, and reports when something does not work out
Working in a problem-solving way	Demonstrates problem-solving ability
Responding adequately to ambiguities	Does not wait but takes initiative when things are not clear
Improvise	Adjusts planning if necessary
Find out what has not been adequately clarified and take on a critical stance	Formulates questions and seeks information sources when there are ambiguities

Getting started as an individual teacher

- Pay explicit attention in the lessons to planning and working independently, according to the level of the pupils and adjust the degree of direction where necessary.
- Allow pupils to create their own weekly schedule using the study guide/testing schedule of the various subjects in ELO.
- Let pupils exchange their own experiences in planning and working independently and turn this into a learning moment
- Teach pupils to plan both individually and jointly and to work independently
- Teach pupils to plan for the shorter and longer term by means of large assignments or the division of tasks
- Offer helpful tools such as checklists, formats, step-by-step planning, logbook and hour registration
- Make use of clear deadlines, reward when things are handed in on time and link consequences to exceeding the deadline, so that the pupils themselves are responsible for planning and achieving deadlines.
- Work from the first year to the exam classes at an increasingly higher level of planning.

Getting started as a team/department

- Map what is already happening in the curriculum in the field of planning and self-employment (in which learning year, in which lessons, how much lesson time, how, what approach)
- Discuss the desired situation and make arrangements about:
    - The desired guidance and time investment in learning plans and working independently;
    - The way in which the study skills can be embedded in the curriculum. Think of planning (applying and practising) during the regular classes, in internships and in projects, and monitoring them during LOB;
    - Use of the same formats and concepts
    - Over the years phase out your degree of guidance; from lecturer-driven via shared guidance to student-driven and from small, more structured assignments to larger, open assignments;
    - Timely access to information the pupil needs to be able to plan, such as timetable schedules, test schedules, submission dates.

2   Finding and processing information

Sub-skills and techniques	Desired behaviour of student
Simultaneous listening and writing	Makes notes during explanations
Using information sources	Uses and compares information of books, (newspaper) articles, Internet, persons, etc.
Valuing information sources	Able to estimate the reliability of resources
Drafting Research questions	Conceives and formulates beforehand what he wants to know
Distinguish between main and minor themes	examines main theme first and then minor themes
Select relevant information	Extracts important information from conversations, lessons, discussions, etc.
Organise information	Classify information based on relevance, coherence and reliability.

Getting started as an individual teacher

- For each subject, assign tasks whereby information sources must be used and specified
- Teach students where they can find up-to-date and reliable information, such as through Google Scholar, Knowledge Link, and the Media Library.
- Teach students how to assess the reliability of resources and information
- Teach students how to correctly refer to literature, both in the text and in the literature list.
- Teach students how they can automatically generate a table of contents, page numbers, and citations in Word.
- Make students aware of the processing capabilities of sources, such as quoting and deriving.
- Teach students various ways of information processing such as underlining the main issues, creating a summary, drawing up a schedule, diagram and mind mapping.

- Steer assignments towards different end products such as a presentation, report or article
- Have students hand in interim work and provide feedback
- Design an assignment: "Find information".

Getting started as a team/department

- Decide on how the citations should be accounted for (for example, APA standards) and apply them consistently throughout the course.
- Discuss in the team how, when and how resource use is to be included in the teaching program
- Stay in tune with each other: the assignments can become increasingly complex and do not have to be linked to a particular subject; together you can build something.

3 Reading and Learning Texts

Sub-skills and techniques	Desired behaviour of students
Study and process large amounts of information	Studies and processes several chapters or books for test/examination/exam
Understand English (subject) literature (besides the subject English itself)	Reads and understands English (subject) literature
Distinguish primary and secondary issues	Highlights or underlines main issues/keywords in texts
Summarise	Creates a clear summary of a text and can apply different forms of summarization
Reflect	Establishes links between the different topics, thinks up examples about the information and associates the information with existing knowledge

Getting started as an individual teacher

- Gradually let pupils get used to reading a lot and check with them if they understand the texts. For example, by letting them ask questions to themselves and each other and/or letting them make some assignments
- Pay attention to and practice applying different reading strategies (orienting, searching, understanding, analytical and repeating) towards efficient reading.
- Make students aware that concepts and abstracts are important in order to work effectively and efficiently in practice. Therefore, use concepts and abstractions regularly, possibly using mind maps for the less linguistic students.
- Begin your lessons by introducing concepts and allow pupils to search for practical examples.
- Practice creating different types of summaries (concise, guided, schematic). This is can also be done by mind mapping.
- Have students practice recognizing the structure of a text. For example, by letting them distinguish between primary and secondary issues, between facts and opinions, between

standpoints and arguments. Allow this structure to come back in the layout of their summaries.

- Find texts that prepare for the transition to HBO in terms of size and/or content. For this make use of the HBO Knowledge Base.
- Have students make a reading schedule for a book, run it, and discuss the experiences. In the planning indicate reading and study work separately.
- Add questions to assess insight in the tests and pay special attention to these questions when reviewing test results (using for eg. the OBIT-model * or the RTTI-model *).
- Differentiate within the classes. Give pupils who can handle it more difficult texts or more abstract feedback to tests.

Getting started as a team/department

- As a team/department, make an integral agreement on how to stimulate and implement study skills in the lessons (e.g. about the increasing use of abstract concepts and thinking from theory to practice)
- Agree that pupils must understand a text thoroughly before they begin summarising.
- Apply a subject-surpassing element by using texts related to other subjects in the subject English, for example. Exchange experiences which are thereby gained.

4   Working together

Sub-skills and techniques	Desired behaviour by students
Formulate appropriate objectives together and draw up an appropriate work plan	Ensures appropriate goals and an appropriate workplan and communicates clearly on goals and workplan
Create and comply with work agreements	Makes working arrangements and follows up on them
Distribute tasks	Provides clear allocation of tasks
Work systematically	Monitors load allocations, planning and deadlines
Responds to opportunities and threats	Recognises opportunities and threats and reacts adequately
Combines creativity with realism	Is creative and realistic when it comes to thinking up solutions
Be open to input from others	Listens to others and is open to their input
Introduce your own ideas	Contributes idea's towards the final product
Resolve disagreements and solve problems in the group	Contributes effectively to dealing with disagreements and solving problems within the group
Contribute to good atmosphere within group	Shows interest in other group members
Give feedback	Gives and receives feedback
Be jointly responsible the process and results	Takes responsibility for process and result and also appeals to other participants

Getting started as an individual teacher

- Teach students to collaborate by, for example, allocating tasks within the group, keeping a logbook, and reflecting on the (collaborative)process.
- Stimulate cooperation through targeted assignments, through the layout of the classroom, variation in group size, assessing the cooperation as part of the overall assessment or by reviewing points instead of assigning a grade, which the students in the group must divide among themselves whereby everyone gets a (possibly different) individual grade.
- In the lesson, pay attention to giving feedback focused on collaboration.
- Vary in the way groups are put together: by pupils themselves, according to learning styles, through luck of the draw, based on shoe size or length, etc.
- Think about why you choose for collaboration and why you choose the particular way you formed the groups.
- Make sure there are moments in between, where a team/group meets to allocate tasks and monitor progress.
- Allow pupils to investigate or make a test in groups of two or three.
- Let students give each other feedback.
- Plan enough time for the guidance of collaborative assignments.

Getting started as a team/department

- Map out what is happening right now in terms of developing the skills for working together.
- Make agreements on the roles and associated terms (chairman, time guard, etc.) within the department uses.
- Create a build-up from small to large group assignments and spread them over the entire training.
- Make an overview of which pupil collaborates in which group, this can result in a better variation in the composition of groups.
- Plan enough time for the supervision of collaborative projects.

5   Analysing

Sub-skills and techniques	Desired behaviour by student
Establish relationship between theory and practice	Establishes a link between theory and practice
Define problem	Establishes a problem and then systematically dissects it into elements
Compare information and make associations	Compares and links information from different sources
Assess information	Determines whether information is complete and reliable and distinguishes primary from secondary issues
Distinguish facts and opinions	Makes sure that it concerns opinions or facts
Draw conclusions	Draws logical conclusions from collected information

Getting started as an individual teacher

- When discussing problems in the lesson use different analytical methods such as brainstorming, the five W's (who, what, where, when and why), the How-to question, the demand for cause-effects, the three m-Levels (micro, meso, macro) the STARR (T) method *, and spiderweb or mind map.
- Teach pupils to use analytical methods while working on assignments.
- Teach students to explore a problem carefully before they come up with solutions.
- Give students more autonomy within assignments.
- In complex situations, make a mind map that clearly shows associations in the analysis
- Teach students to associate between practice and theoretical frameworks.
- Allow pupils to experience that analysis is important in the design of an investigation as well as in the data processing. Practice with educational cases/graphs/results and then challenge pupils by giving feedback and thinking things through during supervision.
- Teach pupils to look critically at their own results.

Getting started as a team/department

- Make agreements about which and where analytical methods are used in the curriculum.
- In the curriculum, allow for deductive * (learning) thinking.
- Show in which subjects analytical skills are taught and make sure they are used in other subjects as well.

6   Use of ICT

Sub-skills/techniques	Desired behaviour by student
Make use of digital literacy	Deals with online and offline media in a responsible and intelligent way.
Use an electronic learning environment (ELO)	Know the possibilities of an ELO and can exploit it effectively
Use word processing programs, spreadsheet programs, database programs, and presentation software	Can handle common word processing programs, spreadsheet programs database programs and presentation software
Search for information	Effectively uses search commands
Computational thinking	Can think creatively about deploying digital tools to solve a problem

Getting started as an individual teacher

- Integrate the use of an ELO (electronic learning environment) within lessons/education
- Learn to work with various ICT applications and ICT programs within one's own discipline. Think of: Word, Google docs, Pages, Excel, Access, Numbers, PowerPoint and Prezi
- Include (assessment) criteria for a presentation, report or reporting requirements that help students become familiar with various aspects of word processing programs, spreadsheet programs, database programs, and presentation programmes.

- Pay attention to social media and its (im)possibilities within the lessons.
- State the purpose of using ICT, where possible linked to vocational training
- Make sure ICT has an added value, do not use ICT for the sake of ICT.
- Choose a method in which ICT is already involved; this saves a lot of development and search time.
- When using ICT in the lesson, check whether hard-and software are working.
- Make sure you stay up to date with the latest developments/apps.

Getting started as a team/department

- Formulate a common vision on the use of ICT within the education system.
- Organise lessons in Word and Excel and ensure that pupils apply the learned knowledge in all learning years to as many subjects as possible.
- Make separate agreements about the use of social media.
- Explore the possibilities of online learning in conjunction with face-to-face learning.
- Work with a plagiarism scanner such as Ephorus to counteract plagiarism.
- Enumerate the ICT possibilities within your own discipline and agree what/how one will make use of ICT.
- Make sure there are enough devices, the network is functioning properly and the correct software is installed on time.
- Invest in the ICT skills of teachers.
- Organise workshops for colleagues
- Have teachers, for example during a team meeting, demonstrate to each other the use of ICT in the lesson (good practices).

7   Research

Sub-skills/techniques	Desired behaviour by students
Problem exploring	Reviews what is already known about the topic
Ask research questions	Formulates the research problem (main question) and derived sub-questions
Determine research method	Makes a responsible choice for (qualitative or quantitative) research methodology
Draw up research plan	Proposes an appropriate and complete research plan taking into account research methodology and planning
Carry out literature research	Consults and compares various resources relevant to research
Gather research data	Collects existing and/or own research data correctly and systematically
Make conclusions	Draws logical conclusions that answer the research questions
Write up report	Reports on the research methodology and results

Evaluate	Reflects on the research, discusses results and provides recommendations for follow-up research

Getting started as an individual teacher

- Teach pupils to doubt about acquired knowledge, for example by showing various research results to the same problem
- Make students curious by asking questions about interesting research results. Make use of, for example, the journal Quest.
- Stimulate an inquisitive attitude by asking open questions.
- Take time to describe the context before asking the student to formulate a research question.
- Use the SMART method * for drawing up research questions
- Name the resources you used when teaching and put them up for discussion.
- Ask the class to look for reliable sources on a theme that captivates the pupils. Make statements and discuss with each other, where the arguments used can only be extracted from sources.
- Discuss a small and interesting research question and based on this elucidate the concepts of research plan, research phases, methodology and reporting
- Do not only offer practical's as a cookbook recipe
- Have students carry out socially relevant studies.

Getting started as a team/department

- Go from a line of research into a continuing curriculum in education, where an investigative attitude is gradually introduced and taught. Begin in the lower classes with a small research project.
- Allow pupils in the pre-exam class to carry out small research assignments in compulsory subjects such as social science, CKV and LO as a preparation for the PWS.
- As teachers, exchange experiences about supervising and providing guidance to research projects.

8   Reporting

Subskills/techniques	Desired behaviour by student
Writing in phases	Writes in phases: orientation, planning, executing and reviewing
Identify the target group	Tunes content to target audience
Decide on content	Provides correct and relevant information needed to achieve goal
Provide format and design	Keeps to guidelines to ensure an appropriate and attractive design
Ensure correct language use	Uses English correctly

Choose effective language usage	Formulates precisely and concisely and gears language use to the target group
Provide list of resources	Gives full citation according to guidelines

Getting started as an individual teacher

- Screen articles for arguments with the students
- Let students read a research report and view the structure, substantiation and context.
- Give students sample reports and substantiate the contents based on the theory
- Have pupils assess reports from Hbo'ers. Make use of the HBO Knowledge Base for this.
- Invite students to read and review a sample report in English.
- Teach pupils that writing occurs in phases: preparing, writing, reviewing
- Teach students to write crisply and correctly.
- Have pupils check whether the report constitutes a coherent whole.
- Regularly link to other courses, lessons and professions.
- Use a rating model that matches the type of report that the student makes.
- Use a plagiarism scanner when assessing reports.
- Match the requirements for a practical assignment in the pre-exam year and/or for the profile workpiece to the requirements set out in the HBO to reports.
- Using a report written in Dutch, let pupils write a summary in English (recap).

Getting started as a team/department

- Make cross-sectoral agreements about the content, structure and layout of reports.
- Make agreements within the team about standard assessment criteria and also give opportunity to use variable criteria.
- Add a cross-sectoral element by using subjects/assignments in language courses (English, French, etc) related to the other subjects. Exchange the experiences gained.
- Teach pupils frameworks on which the reports can be made and how to choose from them.
- Include substantiation, argumentation and contextual thinking in the program as important aspects of reporting
- After a test pilot day, have students write a summary of a presentation in three sentences, with the best one winning.

9   Presenting

Sub-skills/techniques	Desired behaviour by student
Identify the target group and study it	Tunes in with the public
Determine the purpose	Determines the purpose of the presentation
Determine contents	Provides understandable and compelling content
Apply structure	Creates a logical structure
Use correct and appropriate language	Uses correct Dutch/English and tune language with the target group

Use tools	Makes effective use of tools
Use voice correctly	Articulates clearly, speaks sufficiently loud, quiet and varied
Adopt good posture	Observes the correct posture
Show correct behaviour	Observes correct behaviour (gestures, eye contact and mimics)
Dealing with reactions	Observes public reactions, makes contact, answers questions
Handling Feedback	Can receive feedback and allow fellow students to give feedback on presentations

Getting started as an individual teacher

- Teach students how to make presentations using various media and supporting tools such as PowerPoint, Prezi, poster, flyer
- Pay attention to examples of good and less good presentations, e.g. film fragments on YouTube and have pupils give feedback.
- Show students online Ted Talks .
- Pay attention not only to the content, but also to the form.
- Let students indicate what they would like to get feedback on.
- Practice with short, business-like presentations. Start small and finish large (PWS).
- Ask pupils to formulate one critical question for each presentation. These can then be discussed and provided with feedback.
- Together with the student/group, create an assessment form for a presentation.
- Have students practice first in smaller groups.
- Teach students to give each other feedback by naming strengths and weaknesses/points of improvement.
- Let students indicate what they want feedback on.
- As a teacher, give a good example by occasionally giving a presentation yourself.

Getting started as a team/department

- Allow students to practice presenting sufficiently without an assessment attached to it.
- Coordinate with each other where in the curriculum tests are included in the form of a presentation.
- Get people from the work field involved in the presentation
- Make agreements in the team about standard assessment criteria and also give the freedom for variable criteria.

10 reflecting

Subskills/techniques	Desired behaviour by student
Develop your own insight	Looks critically at himself and formulates realistic ambitions
Develop awareness of own behaviour	Is aware of its own role and responsibilities and gives guidance to its development process
Reflect on results	Determines whether results meet the quality requirements
Reflect on process	Determines what went well and what could be better
Reflect on learning points	Determines what could be done better next time and how to achieve it

Getting started as an individual teacher

- Take note of the different reflection models (such as ABCD model * and the STARR (T) method *) and decide which model makes most sense in a particular situation.
- Always explain what is meant by reflection and what is the purpose of reflective assignments.
- Create small defined reflection assignments where pupils learn to reflect step by step (individually or as a group).
- Let pupils substantiate their reflection with practical examples and experiences.
- Create a link between the outcomes of the reflection and new learning objectives or assignments.
- Use games in the field of reflecting, which support practicing.
- Ensure that students contribute to (open)assignments that lead to improvements in the execution of the assignment.
- Set clear goals to reach students, only then can students learn to reflect.
- After writing their tests, allow pupils to analyse and evaluate their learning approaches on paper and to report what could be better next time. Discuss with pupils the self-reflection and stimulate their work on improvement points.

Getting started as a team/department

- Organize a study day for teachers about reflection.
- Make agreements about the use of self-tests for the reflective power.
- Acknowledge that reflecting is not a standalone concept. Create awareness of which skills/knowledge application need to be reflected on, followed by an evaluation and final reflection.