



Phenomenon- Based Learning

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Learning Happens Best When



LEARNERS FEEL A SENSE OF
SAFETY AND BELONGING.



LEARNERS KNOW WHAT
THEY ARE LEARNING AND
WHY IT'S SIGNIFICANT.



LEARNERS KNOW WHERE
THEY ARE AS LEARNERS AND
HOW TO GO FURTHER.

Phenomenon-Based Learning



Get real – but base it on the curriculum



Questions



Interdisciplinary approach



Change in the teacher's role



21st century competences



Use of different pedagogical models

Benefits of Phenomenon-Based Learning

1. Students have a vested interest in learning topics they have chosen = they own their learning

2. Facilitates active learning (and teaching) that is hands-on, minds-on and hearts-on

3. Promotes transferable learning skills e.g. team work, critical and creative thinking

4. Students become more skillful in assessing their own and their peers' work

5. Students become better at asking questions and use the 'language for learning'

6. Boosts confidence in tackling tasks and helps develop critical thinking skills

7. Powers collaborative learning and develops negotiating skills

8. Students cover topics in more depth and explore from a variety of perspectives

9. Students consolidate learning by synthesizing ideas from across the curriculum

Phenomenon-Based Learning Cycle

Create a safe
environment

Catch interest

Define
the phenomenon

Set joint learning goals

Division of labour

Support, indirect
guidance, feed forward

Continued formative
assessment, self-
assessment, peer-
assessment,
documentation

Summative evaluation
of both learning process
and its product

Set SMART Goals for Learning



SPECIFIC



MEASURABLE



ATTAINABLE



REALISTIC



TIMED

Teaching Phenomenon-Based Learning, Part 1

Collaboration between teachers

- Structure and goals from the curriculum, participating subjects
- Shared goals and values
- Assessing and visualizing the learning
- Responsibilities and tasks
- Sharing the documents
- Timeframe
 - Time for planning
- Communication with parents

Governance questions

- Assessment, report cards
- Extra resources

Teaching Phenomenon-Based Learning, Part 2

Teacher's different roles

- Facilitator: Support the student-led learning. Help to refine questions and move forward.
- Learner: Be ready and willing to learn alongside the students.
- Be humble. Try to build better knowledge yourself when students' questions arise and be open to the different ways the students tackle the problems.

Teacher needs to have a deep understanding of the learning process.

Teacher's own social and emotional skills!

Discussion time

Teacher's changing roles:

How do I feel about being a facilitator and a learner?

05:00



How to Plan Phenomenon-Based Projects, Part 1



Decide how to choose the phenomena from the real world to which the students can relate.

Local, national or international phenomena

- Teacher team chooses
- Teachers select the scope, but students decide the phenomena
- Teachers and students innovate and choose together

Start small, grow bigger!



Present the phenomena in a very broad way to avoid any constraints to it's study.

How to Plan Phenomenon-Based Projects, Part 2



Make sure the students know

- The goal(s)
- Timeframe
- Resources and working methods
- Assessment methods & criteria
- How to present the final outcome



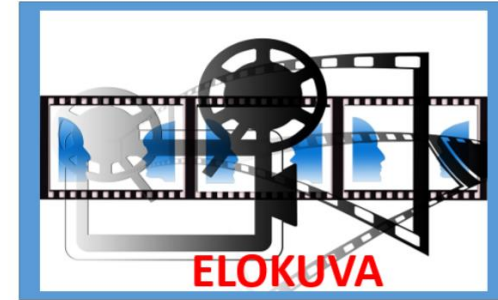
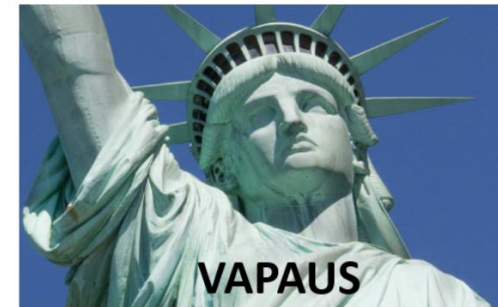
Basic concepts (subject-wise) should be taught before the project.

Work with an **open schedule** so that it is possible to cross the boundaries between subjects.

Share your learning. Remember the importance of **reflecting and closure**!



Choosing the Phenomenon



The Emotional Aspects of Phenomenon-Based Learning



Breaking the old mental models and scripts of schooling



Tolerating ambiguity



The edge emotions



Flow

Assessing Phenomenon-Based Projects



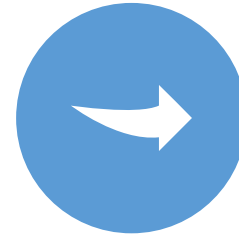
**ONGOING
PROCESS**



**MULTI-
DIMENSIONAL**



**HOLISTIC
ASSESSMENT
CRITERIA**



**FEEDBACK ->
FEED FORWARD**



**FOCUS ON
PROCESS**

Assessment Criteria Examples for the Phenomenon-Based Project Outcome

What kind of expert-like practices were developed in order to carry out the project?

Were the questions and working hypotheses met?

How broadly and deeply students understood the phenomenon?

Were the ways of working meaningful for the project?

How authentically the students were dedicated to the inquiry?

How the different references or sources of information were used?

Creating Ideas for Phenomena-Based Learning



Write down at least 5 different phenomena, one per post-it note



Share your ideas with your neighbour -> select 4 phenomena



Join another pair, share your selected phenomena -> select 2 phenomena



Brainstorm & write down on each 2 phenomena:



Share your ideas with the other group

1. What **subjects** could be involved?
2. What could some of the **learning goals** be?
3. What **working methods** could be used?



05:00



Student Assessment



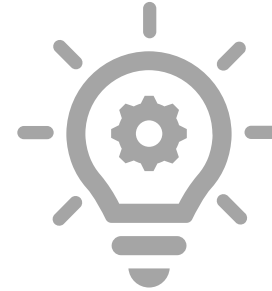
Assessment Focuses



Assessment of knowledge

Knowledge of facts = single facts

Knowledge of concepts = typical concepts of the subject



Assessment of skills

Knowledge of methods = skills to use the typical methods of the subject

Knowledge of metakognition= skills to explore and discuss one's own way of learning

Assessment Objectives

Learning

- Assessment of learning
- Assessments of progress – student's achievement level compared to the criteria

Working skills

- Skills in working independently and together
- Skills in planning, regulating and assessing one's own work

Behavior

- Assessed separately

One-Sided or Versatile Assessment?

Restricted conception of learning

- One way of learning is emphasized
- Learning stays the same over and over again
- Assessing just one kind of goals
- Only one of assessment object is actualized
- Students can show their achievements only once and when the teacher wants

Wider conception of learning

- Multiple ways of learning are used
- There's variance in learning methods
- Assessing many kinds of goals
- All the assessment objects are actualized
- Students can show their achievements on many occasions and in many different ways

Different Methods

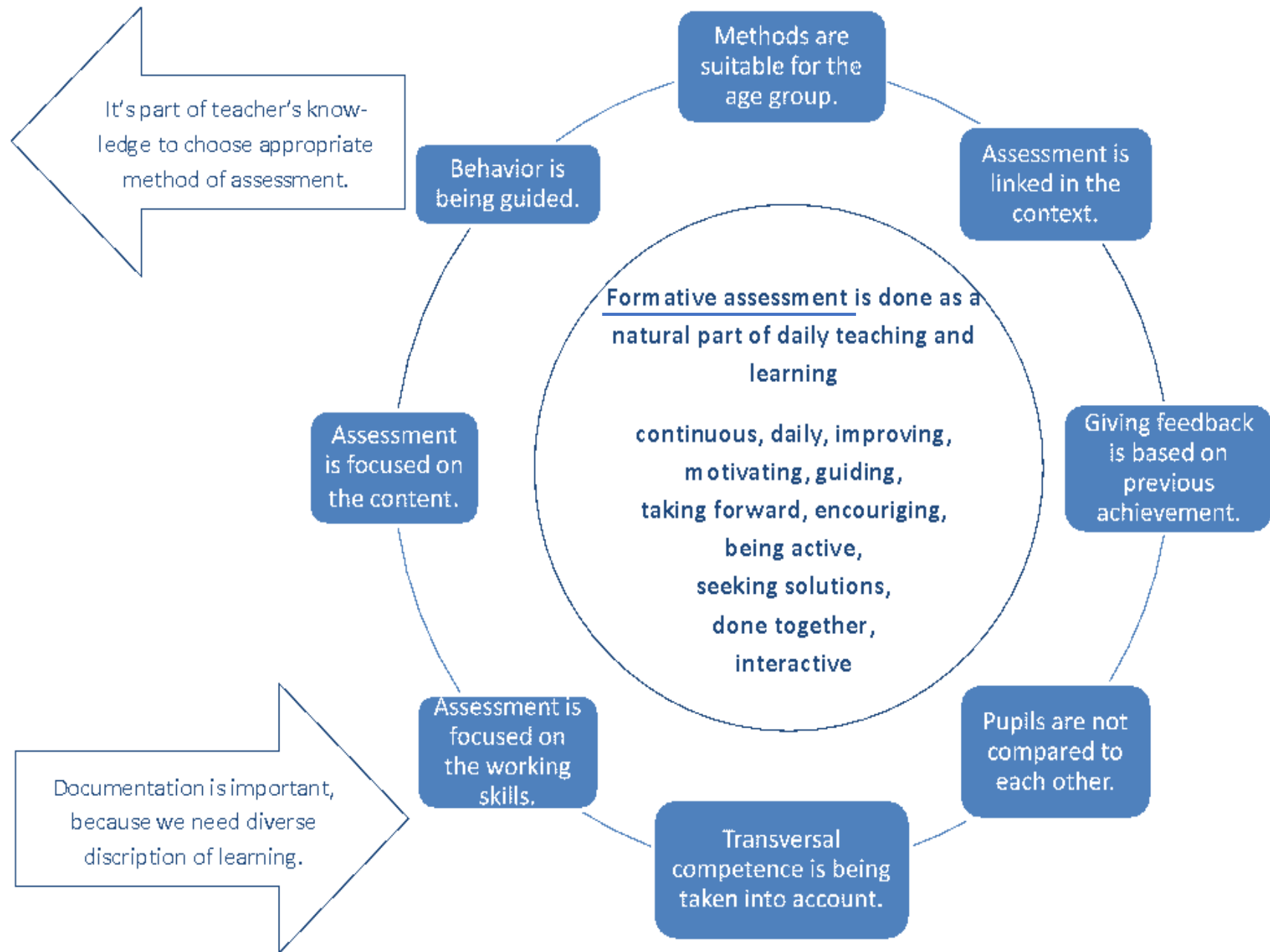
Formative assessment = assessment for learning during the learning period

- Self-assessment, peer-assessment, teacher's feedback/ feed forward
- The aim is to support and encourage the student to do the best she/he can
- Individual feedback

Summative assessment = assessment of the competence

- Criterion-referenced assessment
- Possible national/international evaluation criteria

- D Notebook
- O Portfolio
- C Learning diary
- U Self assessment
- M Peer assessment
- E Group assessment
- N Tests
- T Web tools
- I Discussions
- N Observations
- G Taking photos



Planning Versatile Assessment



The objectives of
learning
– WHAT



The goal of assessment
– WHY



The conception of
learning
– HOW



The timeliness of
assessment
- WHEN

What Assessment Should Mean to the Students

**UNDERSTANDING
ONE'S OWN
KNOWLEDGE AND
SKILLS RIGHT THIS
MOMENT**

**INSIGHT OF LEARNING:
AHAA!**

**HELP AND ADVICE
HOW TO CORRECT
ACTION**

**CONFIRMATION OF
THE RIGHT ACTION**

**SETTING THE NEXT
OBJECTIVES**

Effective Peer-Assessment



Embraces students' **competence to commit** to joint objectives and tasks.



Directs students **to take responsibility** both on their own learning and the learning of others.



Encourages students **to work persistently**.

Binding Assessment into the Learning Process

01

Explain the objectives so clearly that every student can describe in their own words what they are learning.

02

Set out the criteria: What does the successfully done task consist of?

The students need to know what they are expected to do and how they can show what they have learned.

03

Give feedback: describe the required objectives, how the student is doing at the moment, how far these two are from each other and how the student can achieve the objectives.

04

Ask questions which help the students to reflect their action, pay attention to the progress and to see what they have done.

05

Students need to understand the objectives of learning properly in order to be able to do self-assessment and peer-assessment.

Otherwise they are not able to focus on the right things.

The aim of assessment	Where to focus?	Teacher's assessment	Student's self-assessment Peer-assessment
Assessment of the level student begin	The aim is to make student's previous knowledge and skills visible and set new goals for learning.		
Assessment of student's learning	The aim is to help the student to understand his/her learning and to correct her/his actions in order to achieve his/her goals.		
Assessment of the student's achievement level	The aim is to make the progress of learning visible and to assess student's level of achievement and to set new objectives, both skills and knowledge.		



Děkuji!
Thank you!

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