

Reflection sheet on informatics-specific lesson plans

A reflection sheet (Höppner et al., 2019) was created to assess the teaching skills. The participants in the role of the teacher, the participants in the role of the learner (primary school children) and a group of employees of the chair of didactics of computer science assess the conducted/implemented teaching unit (version 1) on a five-point Likert scale (5 - applies, 1 - does not apply).

In creating the reflection sheet, existing statements such as those of good teaching (Helmke, 2015a; Meyer, 2007) were drawn from. Statements on informatics-specific teaching related to the target group of primary school children were formulated based on Lehner (2020) and Maras et al. (2019). After the joint reflection in the seminar, the participants revise their lesson plans (version 2). Version 2 of the lesson plan is assessed again.

In the following, the formulated statements based on which a group of employees of the chair of didactics of computer science assesses the lesson plans (planning), are listed, including the sources.

Note: All statements are surveyed using 5-point Likert scale (5 = applies, 1 = does not apply).

Statements	Based on
The lesson plan has a clear structure.	(Helmke, 2015a Einblicknahme in die Lehr- und Lernsituation_ABS, V 7.1, p. 2, 22.)
The lesson plan actively builds on the students' previous experiences and knowledge.	(Meyer, 2007, p. 230 Bogen 1, 12.)
The lesson plan contains examples from the students' everyday life/world and/or ties in with the students' interests.	(Helmke, 2015a Einblicknahme in die Lehr- und Lernsituation_ABS, V 7.1, p. 1, 8.)
In the lesson plan, the work assignments are formulated in a way that is understandable for the target group.	(Meyer, 2007, p. 230 Bogen 1, 9.)
The materials used in the lesson plan are designed in a way that is appealing to and understandable for the target group.	(Meyer, 2007, p. 233 Bogen 2, 14.)
The lesson plan is designed in a student-centered and activating way.	(Meyer, 2007, p. 233 Bogen 2, 15. & 16.)
The lesson plan focuses on informatics-specific content.	(Maras et al., 2019, p. 317)
In the lesson plan, the informatics-specific subject matter is effectively developed with the students.	(Helmke, 2015b Einblick in die Lehr-Lern-Situation, EVIT, p. 1, 1. Meyer, 2007, p. 230 Bogen 1, 6.)
In the lesson plan, the informatics-specific subject matter is explained technically correct.	(Lehner, 2020, p. 141 f; Maras et al., 2019, p. 317; Meyer, 2007, p. 230 Bogen 1, 10.)

In the lesson plan, the informatics-specific subject matter is explained in a way that is appropriate for the target group.	(Lehner, 2020, p. 142)
In the lesson plan, the informatics-specific content is prepared in accordance with the formulated learning goals.	(Lehner, 2020, p. 142)

Information for the participants of the seminar incl. the items

As discussed, you will take on the role of both the teacher and the primary school child during the trial.

- When you conduct part of your lesson, you will take on the **role of the primary school teacher**. After the lesson you will have the opportunity to reflect on your lesson using an online questionnaire with a matrix question and a free-text task. In the matrix question, please rate the nine statements about your lesson on a scale from **5 - applies** to **1 - does not apply**.
- When another person is conducting parts of your lesson, you will take on **the role of a primary school child** and participate in the lesson as such. Afterwards, you will be given the opportunity to reflect on this lesson using an online questionnaire. To do this, please rate the nine statements about the lesson on a scale from **5 - applies** to **1 - does not apply** and answer three free-text questions.

Reflection by students in the role of the teacher

Note: All statements are surveyed using 5-point Likert scale (5 = applies, 1 = does not apply).

For each lesson, please rate on the scale of 5 - applies to 1 - does not apply .					
	5	4	3	2	1
I structured the lesson clearly.					
I integrated examples from the students' everyday life/world or linked the lesson to the students' interests.					
I formulated the work assignments in a way that is understandable for the target group.					
I designed the materials in an appealing and understandable way for the target group.					
I designed the lesson in a student-centered and activating way.					
I focused on informatics-specific content in the lesson.					

I have worked out the informatics-specific subject matter with the students in a purposeful and effective manner.					
I have explained the informatics-specific subject matter in a technically correct manner.					
I explained the informatics-specific subject matter in a way that is appropriate for the target group.					
I responded constructively and technically correct to students' questions/errors.					

Free-text task:

- Please indicate what you take away - from a technical and didactic point of view - from the implementation of your teaching unit to further enable informatics topics for primary school children.

Reflection by students in the role of the primary school children

For each lesson, please rate on the scale of 5 - applies to 1 - does not apply .					
	5	4	3	2	1
The teacher structured the lesson clearly.					
The teacher integrated examples from the students' everyday life/world and/or linked the lesson to the students' interests.					
The teacher formulated the work assignments in a way that is understandable for the target group.					
The teacher designed the materials in an appealing and understandable way for the target group.					
The teacher designed the lesson in a student-centered and activating way.					
The teacher focused on informatics-specific content in the lesson.					
The teacher worked out the informatics specific subject matter with the students in an effective manner.					
The teacher explained the subject matter technically correct.					

The teacher explained the informatics specific subject matter in a way that is appropriate for the target group.					
The teacher responded to student questions/errors in a constructive and technically correct manner. (Informatics specific technically correct)					

Free text assignments for students in the role of **primary school children**:

- What do you think are the learning goals of this lesson? Please formulate in a sentence.
- Please formulate three technical and didactic points each that you noticed positively and that you would like to share as potential improvements for the teacher of this teaching unit.
- Please state what you will take away from the participation in the teaching unit for your own teaching units on informatics topics.

Bibliography

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