







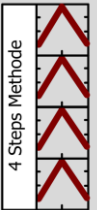
Help for the usage of the Symbols

The symbols simplify the notes and are the pedagogical notes for the classification of the observed/ seen action. Furthermore, they are the base for the notes concerning questions for/ in the talk. The usage of the symbols is easy if the observer has experiences with the way they should be used, and if he/she knows pedagogical situations and constellations that are important for the continuation of the lesson and the relations between teachers and students.

The document at hand will help you in using the symbols.

Symbols	Description of the Action	Range of typical perceptions of observers	Meaning
1 (4)  Formulation of Assumption clarification/illustration/visualization by teacher	The teacher emphasizes the result of one lesson sequence The teacher changes the volume of the voice or the pace of speech.	⇒ phenomenal comprehensible ⇒ The teacher-student talk is finished/over. ⇒ One step of thinking of the teacher's explanation is finished. The teacher formulates exactly the results/findings or repeats the results for all students comprehensibly. Part of classical methods	Aim is: to build a common base of thinking for all students or to point out steps of thinking. Basis for: aim oriented thinking of students Precondition for the collective start of thinking process
 Teacher's Response to Request for Student's Behavior	The teacher demands the attention of the students. The teacher changes the volume of the voice or the pace of speech. Possibilities/variations: no speaking, writing, whispering, changing position in the room. some more	⇒ phenomenal comprehensible ⇒ The students' work is finished. ⇒ The teacher wants to give a call for action. The teacher centres the attention of the students and expects the interruption of the students' activity. Expression of teacher's personality	Aim is: all students are willing to take in new information, independent of their current doing and thinking basis for: aim oriented thinking and doing of the students and the comprehension of the explanation Precondition for giving instructions how to act
 Initiation of Activities Motivation	The teacher initiates student's action. He defines the wanted actions, shows possibilities and if necessary restricts actions or possibilities	⇒ phenomenal comprehensible ⇒ The teacher formulates the task for the students. ⇒ He gives an orientation on "how" a task is solved. The teacher formulates the aims in regard to content and the kind of interactions. Expression of teacher's teaching competence	Aim is: exact orientation of all students on the expected activity, no student echo -fast start of next planned lesson period Basis for: aim oriented thinking and doing of the students and the comprehension of the explanation Precondition for students activity and concentration
 Time Management	The teacher defines the time frame for solving the task. The teacher gives the students an overview of the temporal lesson structure. The teacher defines a temporal code/rule.	⇒ phenomenal comprehensible ⇒ The teacher makes clear that the activities of the students and the teacher are a cognitive process. .The teacher gives an orientation – in what time a task has to be solved The teacher balances between phases of freedom for the acquirement of competences and temporal alternatives. Expression of educational competence of the teacher	Aim is: Aim oriented students work Useful choice of aids and work equipment through the students practice in dealing with time pressure Basis for: Efficient solution of tasks Handlungsentscheidungen Precondition for giving instructions how to act

<p>2 (4)</p>  <p>Methodological Approach well/badly thought out/ carried out consciously 1, 2, 3 → methodological steps</p>	<p>The teacher uses a scientifically proven teaching method.</p> <p>The method/ structure of the lesson is known by the observer.</p> <p>Very often the method consists of 3 partial steps. With the symbol one can only note down one step.</p> <p>The symbol symbolizes every teaching method..</p>	<p>⇒ Requires educational/pedagogical knowledge</p> <p>⇒ The teacher works with propositions.</p> <p>⇒ The explanation is logical with different levels of cognition.</p> <p>⇒ Is used mainly in the articulation phase –“immersion”/ didactical function is deployed.</p> <p>⇒ The activity of the students shows the suitability of the method.</p> <p>⇒ The teacher conducts, the students think and do. logical.</p> <p>Expression of the right assessment of the students study competence through the teacher.</p>	<p>Aim is:</p> <p>Practice of logarithms of thinking and doing</p> <p>Traceability of approach (step sequence)</p> <p>Basis for:</p> <p>The solution of analogical tasks, making decisions , combining and creative thinking</p> <p>Precondition for competence of how to act</p>
<p>Symbolik</p>	<p>Description of the Action</p>	<p>Range of typical perceptions of observers</p>	<p>Meaning</p>
 <p>Teaching – related Differentiation of subjects by: Time, Level of contents and Amount of help</p>	<p>The teacher recognizes the different work paces, the current knowledge of a student or handicaps/problems during the process of thinking of the students.</p> <p>To make sure that every student has an increase of knowledge, the teacher assists each student in an appropriate way.</p>	<p>⇒ phenomenal comprehensible</p> <p>⇒ The teacher gives differentiated, different tasks.</p> <p>⇒ The teacher extends the task.</p> <p>⇒ The teacher allows aids.</p> <p>⇒ The teacher announces semi results.</p> <p>⇒ The teacher helps individually through facts or steps of analysis.</p> <p>Expression of teacher’s teaching competence</p>	<p>Aim is:</p> <p>All the students reach a given level of the cognitive process/understanding/knowledge.</p> <p>All students are occupied within the planned sequence of time.</p> <p>The individual advancement of all students.</p> <p>Basis for:</p> <p>Securing the success of the learning process.</p> <p>Motivation of the student within the ongoing learning process.</p> <p>Constitution of aims concerning the learning process</p> <p>Precondition for aims</p>
 <p>Negation of Negation (Process of Developing the best Idea through Rejection and Collection) student- focused teacher-student-interaction, positive emphasis, negative dismissal increase of knowledge during the process of independent studying by students</p>	<p>The students solve a task while discussing it.</p> <p>The teacher mediates/ supervises/ controls the discussion. Through the limitation of the basic conditions and new impulses a higher level of the cognitive process. The “correct” solution is kept , the “incorrect” is “thrown away”.</p>	<p>⇒ Observation of a process</p> <p>⇒ The teacher formulates the problem. The students express their experiences or knowledge.</p> <p>⇒ Students and teacher exclude answers and add new aspects.</p> <p>⇒ Teacher – student –talk for the acquirement combinatory knowledge</p> <p>Part of classical teaching methods</p>	<p>Aim is:</p> <p>Collection of a wide number of opinions, equality of expressing opinions</p> <p>The teacher conducts, the students argue</p> <p>Students think actively</p> <p>Basis for:</p> <p>Acceptances/recognition of experiences, courage to express ones opinion, independent thinking, comprehension of a process</p> <p>Precondition for group work</p>
 <p>Silence in the Classroom Free Reading of a Task</p>	<p>Silence in the classroom is the best precondition for independent students´ work.</p> <p>Silence shouldn´t be the result of pressure from the teacher but much more the result of an exactly given task.</p>	<p>⇒ phenomenal comprehensible</p> <p>⇒ The students understand the task independently.</p> <p>⇒ The students use their aids.</p> <p>⇒ The students know the steps of the actions.</p> <p>Expression of teachers teaching competence</p>	<p>Aim is: To provide optimum conditions for solving a task</p> <p>To stop permanent disquietness/ disturbance in very active classes</p> <p>Basis for: Independent students work</p> <p>Reflection on oneself</p> <p>Precondition for correct doing/acting and correct reading</p>

<p>3 (4)</p>  <p>Collection of Experiences/ Ideas/Thoughts on blackboard use of blackboard</p>	<p>The teacher asks for alternative experiences and knowledge of the students.</p> <p>The teacher collects a multitude of correct answers.</p> <p>Through writing them down on the blackboard all students' answers are kept and appreciated.</p>	<p>⇒ Observation of a process</p> <ul style="list-style-type: none"> ⇒ The teacher is aware of the fact that the students already have knowledge and uses it as the base for thinking processes. ⇒ Enquires about facts, little discussion ⇒ The teacher includes a wide big number of people. ⇒ He dismisses double argumentation and wrong contributions. ⇒ The more answers were given, the more difficult it is for the students to find further/ more correct answers. <p>Start of a new lesson period, formulation of assumption within classical methods of thinking</p>	<p>Aim is:</p> <p>To gather experiences and knowledge, inclusion of all students Active thinking of all students Division of the work phases "collecting" and "discussing".</p> <p>Basis for:</p> <p>Courage to express opinion, versatile thinking, understanding a cognitive process</p> <p>Precondition for optimal teacher-student -relationship</p>
<p>Symbolik</p>  <p>Generalization intervention of teacher</p>	<p>Description of the Action</p> <p>The teacher actively controls the discussions of the students. He isolates the core topic from opinions of the students that add new aspects and don't help to solve the problem. The teacher names assumptions for the following steps of thinking.</p> <p>The teacher summarizes the results of the discussion sequences.</p>	<p>Range of typical perceptions of observers</p> <p>⇒ Observation of a process</p> <ul style="list-style-type: none"> ⇒ The teacher stays inactive during the discussion of the students. ⇒ The teacher interrupts the discussion briefly to clarify the wanted solution and to point out the important students answers as a base for further discussions. ⇒ During an independent students task the teacher recognizes similar mistakes and excludes further activities for all students. <p>Part of classical teaching method and a variation in the "negation of negation" process</p>	<p>Meaning</p> <p>Aim is:</p> <p>efficient thinking of students Erziehung zu sachlicher Meinungsäußerung Clear separation of the levels of thinking: "cause" and "outcome" or "characteristics" and "behaviour"</p> <p>Basis for:</p> <p>Logically consistent thinking, comprehension of the basics</p> <p>Precondition for fair discussions and structural thinking</p>
 <p>Phase 1: Preparation aims (intentions)/ partial aims</p> <p>Phase 2: Demonstration Focusing</p> <p>Phase 3: Imitation assistance/supervision, interactions</p> <p>Phase 4: Exercise assistance/supervision, interactions</p>	<p>The 4 Steps Method is mainly used by students in all lessons with practical work phases. The 4 Phases are following each other logically and will be practiced in several time intervals.</p> <p>In the 1st phase the teacher teaches theoretical knowledge. Then the students learn practical skills through the comprehension of the presented activities.</p>	<p>⇒ Observation of a process</p> <ul style="list-style-type: none"> ⇒ The 4 level method is used quite often in lessons with practical content . The levels are easy to follow/ to recognize. ⇒ The teacher divides the lesson in clearly separated intervals. ⇒ The teaching of the theoretical knowledge is often done in sequences where the teacher explains factual/ subject/process related knowledge. The teacher actively conducts the process of learning and teaching. ⇒ The students make a work piece. <p>Contains procedures of classical teaching methods</p>	<p>Aim is:</p> <p>Students learn practical skills Students can support their activities with theoretical knowledge. Controlling the success of the learning process is well practicable by the teacher.</p> <p>Basis for:</p> <p>Independent students activity, success and motivation</p> <p>Precondition for willingness to perform.</p>

<p>4 (4)</p>  <p>Re-orientation cancelation of task</p>	<p>The teacher interrupts/breaks off a planned phase of the teaching process. He formulates new requirements/ demands and changes the aim(s) of the lesson.</p> <p>The students are not able to fulfil the demanded activities.</p> <p>The teacher formulates the necessity of the break off.</p>	<p>⇒ phenomenal comprehensible</p> <p>⇒ At first, the teacher thinks the students did not understand him.</p> <p>⇒ Te teacher provides help or formulates more questions. The teacher tells the solution.</p> <p>⇒ didactical reduction</p> <p>⇒ Students cannot think in the afternoon.</p>	<p>Aim is:</p> <p>To activate students again</p> <p>To find the level of students standard</p> <p>To adjust the requirements to the special circumstances.</p> <p>Basis for:</p> <p>Securing the learning success</p> <p>optimum teacher – student - relationship</p>
<p>Symbolik</p>	<p>Description of the Action</p>	<p>Range of typical perceptions of observers</p>	<p>Precondition for attention</p>
 <p>Differentiation of Students' activities by : Organizing (themselves) within the classroom, Contents</p>	<p>The students cannot all do the same tasks in the lesson.</p> <p>There are not enough of the same machines in one room.</p> <p>The students work on the same project but have different tasks.</p> <p>The students have different work paces. During the work period they work on different contents.</p>	<p>⇒ Observation of a process</p> <p>⇒ There is a differentiation in most of the lessons.</p> <p>⇒ The teacher specifies the activities of the students and provides/ gives a certain structure for the complete lesson.</p> <p>⇒ The teacher gives time intervals for the activities.</p> <p>The teacher defines sequences of quality control on the work pieces.</p>	<p>Aim is:</p> <p>All students are actively involved</p> <p>Utilisation of all resources</p> <p>Students finish the work on one building unit at the same time.</p> <p>Controlling the success of the learning process is well practicable by the teacher.</p> <p>Basis for: Independent students work</p> <p>Activity, self - control of students</p>
 <p>Work Safety hints, control, evaluation</p>	<p>The teacher does an essential safety at work instruction.</p> <p>He tells a student who misbehaved, how to behave right.</p> <p>He is a role model for correct behaviour.</p> <p>The students start their work independently considering the active measures of work protection..</p>	<p>⇒ Observation of activity</p> <p>During the process of giving instructions the teacher tells all students the active means and measures to prevent accidents.</p> <p>⇒ In the "show phase" the teacher repeats in detail the means of safety at work.</p> <p>⇒ The teacher reminds students individually to fulfil the means of work safety.</p>	<p>Aim is:</p> <p>Prevention of accidents</p> <p>Education to careful acting and anticipating thinking</p> <p>Homogenous acting of students</p> <p>Basis for:</p> <p>Awareness of dangers, preventive protection of students, consciousness, self-control of students</p>
 <p>Project - Idea Quality of Choices actuality</p>	<p>The teacher plans all activities fort the production of a work piece or unit. He evaluates the current status of the results.</p> <p>He puts the planned activities in order with the steps of the project.</p> <p>The project idea is the main/guiding idea of the education.</p>	<p>⇒ phenomenal comprehensible</p> <p>⇒ The teacher starts the lesson and names the acquired status and the planned activities.</p> <p>⇒ The students and the teacher work together on the wanted activities.</p> <p>⇒ The students and the teacher work on a technology.</p> <p>⇒ The teacher refers to the aim.</p>	<p>Aim is:</p> <p>Clarification of task identity</p> <p>Goal - orientation and motivation</p> <p>The students reach a certain aim and work continuously for a long time.</p> <p>Basis for:</p> <p>Demonstration of real student achievement, consciousness, motivation, comparability, self-control of students</p>
		<p>Expression of teacher's pedagogical competence</p>	<p>Precondition for experiencing realtime results</p>