MATRIX - Fundamentals of good teaching Advising, assessing and evaluating



Study seminar for grammar schools Marburg

MATRIX Basics of good teaching Advising, assessing and evaluating

MATRIX - Fundamentals of good teaching Counselling, assessment and evaluation at the Studienseminar für Gymnasien Marburg

Clarity of role

		Appeara charisma		Contact & pathy skills	Apprecia	tion	Joy, enthusiasm		Clear and flexible action		understanding / self- reflection	
Dim	ensions of good teaching		Planning				Realisation					
Ö.	Didactics	\rightarrow	Didactic centre, subject analysis, significance, material analysis				professional prrectness	Meaningfulness for learners		Error culture		Flexibility
,A (+3)	Specialised dida	ctics	methods a	Basic principles of the subject, methods and media, embedding in the teaching context		>						
Ć	Expertise and goal orientation	\rightarrow		ng and competence g the end, diagnosis an knowledge			vation of prior nowledge	Task formats, ta definition	Task formats, task Backup, definition exerc			Increased learning and expertise
3:	Activation	\rightarrow	conflict, c	Learning stimulus, e.g. cognitive conflict, consideration of different learning channels and social forms. Learning channels and social forms, Think - Pair - Share principle			ognitive tivation	Motivation		Methods, media & social forms		Participation
	Structure / transparen	С	Think -				Clarity of tives and dures	Coherence phase linking	notwoon loar		ing dialogue structure	
(P)	Learning process support		clarity of ob	pjectives and procedu rning group analysis, ifferentiated access	ires	Role o	of the teacher	Feedback	Feedback		h	self-directed learning
	Class guidand	ce →	Stimulating learning environment, flexible time management, alternative				ption of the arning group	Rules & routines time utilisa				Climate conducive to learning
	Conducting dialo	ogue	Anticipation	ulses	no dialog	on-verbal jue	verbal dial	ogue	Networking security		Assessment / meta-reflection	
										Colour	gradient: I	ncrease in the degree of complex
Reflection:			Structured & rele		tion of engths &		alternatives a equences	realist. As	increase in competence pe			ty of self- tion & situational less

Sources: Office for Teacher Training Hesse (2011). On the way to competence-oriented teaching - designing teaching and learning processes. A process model to support lesson development; Hattie, John (2014). Making learning visible for teachers. Hohengehren: Schneider Verlag; Helmke, Andreas (2015⁶). Teaching quality and teacher professionalism. Diagnosis, evaluation and improvement of teaching. Seelze: Klett-Kallmeyer; Hessian Ministry of Education and Cultural Affairs (2011). Hessian Reference Framework for School Quality (HRS). Quality areas,

FOREWORD

The "Matrix - Fundamentals of good teaching: counselling, assessment and evaluation at the Studienseminar für Gymnasien Marburg" is intended to serve as a guide and aid for teachers in the preparatory service (LiV) for lesson planning, implementation and reflection and as a basis for transparent and criteria-based counselling and evaluation of lessons for trainers.

It is the result a lengthy participatory process involving trainees and trainers. The content is based on current findings from empirical teaching researchlearning psychology and concrete experiences from many years of training work. This product is therefore the result of a joint endeavour to reach a basic understanding. At the same time, it is intended to form a basis for an ongoing joint communication process and the individual understanding process of all those involved.

The matrix is based on the fundamental idea that learning is a holistic and complex process. In order to analyse the successes and difficulties in shaping this process, a set of conceptual tools is needed guide those involved. In this context, the further development of a common language is important in order to make communication about teaching and learning processes in training events and in counselling and assessment situations comprehensible and of high quality.

The structure and content of the tabular overview of the matrix (see inside cover) should take into account the liveliness and complexity of teaching activities.

- The origin of all teaching quality is the teacher's personality, whose attitude towards learners and subjects is of paramount importance. This is emphasised graphically by the fact that this criterion is shown above the system.
- The central categories of the matrix are to be read from left to right: The respective dimension for successful teaching is first assigned the aspects to be considered during planning, followed by the criteria that are important during implementation. The fields that darken towards the right potential progressions of the requirement levels. At the same time, each criterion can be implemented at different quality levels.

- Within the matrix, it is not possible give a universally valid weighting to the criteria. The respective reasons for the success of lessons are too individual and situation-dependent for this. Priorities must be set on the basis of modulespecific agreements on the one hand, and on the basis of the respective teaching situation on the other.
- Reflection, which should take into account aspects of planning and implementation with an appropriate focus, is an important part of counselling and forms a further basis for evaluation.

The tabular overview is supplemented by the formulation of indicators. The indicators clarify how the phenomena to be observed in lessons become visible. The criteria for good teaching are explained in the respective sections and concretised using indicators.

The trainers at the Marburg study seminar have organised the "Matrix - Fundamentals of good teaching: counselling, assessment and evaluation at the Studienseminar für Gymnasien Marburg". They undertake to evaluate the planning, implementation and reflection of lessons on the basis of these criteria.

At first glance, the complexity of teaching described above may appear to be an almost unmanageable challenge. The trainers at the Marburg Studienseminar für Gymnasien are aware of the fact that it will indeed hardly be possible to do justice to all aspects in the same way. Naturally, they take into account the respective level of training of the when making their judgements. The matrix can help to keep an eye on the relevant aspects and to become more confident in implementing the criteria during the training process. This will balancing processes in the sense of weighing up interests, as decisions must constantly be made regarding the prioritisation of criteria during teaching and its planning, which can always be considered in the light of other possibilities. We want teachers who are willing to make decisions and who it as their task to strengthen their own action strategies and pedagogical intuition, without which such a multitude of decisions would not be possible, and to make them more professional within the framework of training, counselling and increasingly also within the framework of self-reflective processes.

TEACHER PERSONALITY



Personality is an ensemble of relatively stable dispositions that are important for behaviour, success and well-being in the teaching profession. They can be changed, but not modified at will; aspects of stability and change must be considered at the same time.

A special interest in working with children and young people is one, if not the central basic requirement for the teaching profession. With the abundance of desirable human

and job-related characteristics, there is not just a single personality structure to be honoured, but a variety of teacher personalities. Psychological research has developed a "five-factor model" of personality (conscientiousness, agreeableness, openness to experience, extraversion, neuroticism - in the sense of a field of tension between inner calm and balanced emotionality), to which the following explanations refer. Other beneficial characteristics of the teacher personality are self-reflection, humour and resilience. Personality traits such as nervousness, anxiety and a lack of interest in contact and communication have a negative effect.

Appearance and charisma

Appearance and charisma manifest themselves particularly in the verbal and body language of teachers. They are the decisive mediators of every teacher's personality. The teacher's verbal and non-verbal signals are highly effective in classroom communication. Their importance is often underestimated (approx. two thirds of communication is non-verbal). Elements of body language include Posture and demeanour, facial expressions, gestures, eye contact, proxemics (position and movement in space) and use of voice.

- The teacher's verbal and body language match.
- The teacher supports verbal communication by maintaining eye contact.
- She has an upright posture in front of the class.
- She uses her voice in a medium, easily modulated range (diaphragmatic breathing), combined with clear articulation.

Contact and empathy skills

Contact and empathy skills as a teacher's attitude are key elements for a positive relationship between teachers and learners. They therefore form the basis for successful learning.

- The teacher warmth, affection, tolerance and authenticity.
- It stands for empathetic understanding of all the learners' needs and dealing with them sensitively, while at the same time trusting in their abilities and challenging them accordingly.
- The development of a trusting and at the same time professional relationship between teacher and learner (on a factual and relationship level) becomes visible.

Appreciation

Encouragement and recognition of the learners by the teacher lead to a learning-promoting classroom climate in which the pupils are supported in their willingness and efforts to learn.

- Interaction between teachers and students is based on mutual respect.
- The practice of mindfulness (successful self-control and self-direction, in relation to learners and teachers) is taken into account.
- A serious interest of the teacher in the learners and attention to their ideas and conceptions is recognisable.

- Students are given room for personal growth and development processes.
- Unbiased and respectful communication within the learning group is encouraged.

Joy and enthusiasm

A teacher's enjoyment of their work and their enthusiasm for content and processes - authentically lived and professionally practised - are elementary for interest in teaching and learning and characterise the climate of every cooperation.

 The teacher has a credible and clearly perceptible positive attitude towards the subject and the subject matter as well as towards working with the learners.

Clear and flexible action

Clear and binding teacher behaviour on the one hand and a situationappropriate openness on the other lead to a helpful orientation that allows sufficient development opportunities for the learners.

- The teacher can act flexibly and appropriately to the situation and may also deviate from their planning.
- It demonstrates conflict skills and strategies for constructive conflict resolution in conflicts between teachers and learners as well as within the learning group.
- Reliability and conscientiousness characterise the teacher and enable the predictability of the teacher's actions.

Clarity of role understanding / self-reflection

In the course of a successful learning process, the teacher takes on various roles. Depending on the focus of the lesson, these can be different and also interlinked (see also "Role of the teacher", p. 25). Decisive indicators for this are the teacher's awareness of their own professional role, differentiated self-awareness and the realisation of the resulting tasks in teaching practice: professionally planning, guiding, controlling, accompanying and reflecting on learning processes and at the same time motivating and instructing learners and giving them the freedom to learn independently.

- The teacher embodies the respective role through authenticity, credibility, predictability and expertise.
- She has a realistic perception of herself and others in the context of teacherstudent interaction.
- She demonstrates a willingness and ability to self-reflect in her role as a teacher.
- A balanced relationship between closeness and distance between teacher and students becomes visible.
- She assumes the role of a leader towards the students with the consequence of weighing up different goods against each other in different situations and then making and justifying decisions.

DIDACTICS



Didactics is the answer to the question of what (topic) who (learning group) learns how (methodology) for what purpose (relevance/importance). Didactic analysis is therefore the centrepiece and at the same time the overarching category under which all aspects of planning, implementing and reflecting on teaching placed. At the centre of didactic considerations is the respective subject content (topic) of the lesson/series. which analysed in terms of student orientation (learning and requirements) relevance.



must be correctly reflected in the subject matter. Subject-specific and interdisciplinary competences can only be developed and promoted using suitable, i.e. functional, methods if the content of the lesson is accessible, motivating and perceived as important.

Professional correctness

The factual accuracy of the content covered in class is a prerequisite for productive learning processes. In lessons, emphasis is placed on ensuring that no misconceptions or misunderstandings become entrenched in the content.

- The teacher shows that he or she has understood the content of the lesson and is able to convey it correctly. This is an indispensable basis for being able to react appropriately to misunderstandings.
- Incorrect statements made by students are corrected in a pedagogically and didactically sensible manner and not left as such. (see also "Error culture", p. 11 f.)



- With a view to the learning process and securing results, the teacher pays attention to correct content, which is presented or visualised in such a way that it represents the factual structure of the subject matter in a way that makes sense from a learning psychology perspective.
- The teacher can explain facts and contexts well. They attentively and purposefully support the learners' comprehension process.
- The teacher's language oral and written is correct in expression, grammar and spelling and is comprehensible (language model).

Meaningfulness for learners

Experiencing the meaningfulness of learning is fundamental for a positive and motivated attitude among learners. The structure of the lesson is didactically designed in such a way that the content and the desired increase in competence can be experienced as meaningful by the pupils.

- Learning objects are recognisably embedded in a larger context for the pupils.
- Teaching objectives are made transparent and, where possible, are linked to direct or indirect experiences or attitudes of the pupils.
- Pupils are active and interested, articulate their own attitudes and link these to newly learnt content.
- Analogies to authentic life situations are made explicitly where possible.
- Pupils are given space to develop their own problems and solution strategies.

Error culture

Dealing productively with mistakes is a natural part of teaching. Pupils experience mistakes as a learning opportunity to correct misconceptions and learn new things in an error-friendly and fear-free learning atmosphere.



- Pupils' mistakes in their subjective solution approaches are experienced and utilised as productive.
- Pre-concepts as well as misconceptions are seen as learning opportunities and integrated into lessons.
- Pupils are encouraged to try things out in class and to suggest solutions, even at the risk of making mistakes.

Flexibility

Teaching is a living process. Despite careful planning, not all events in lessons can be predicted. This may be due to spontaneous questions and ideas that arise from the pupils during the lesson. However, it can also be due to planning errors, which an alternative approach necessary. In the lesson, a didactically reflective response is made taking these requirements into account (i.e. with a view to the objectives and content of the lesson, which may need to be modified).

- The teacher actively involves students in the learning process: The topic, questions and approach are discussed together with the pupils, problems and possible solutions are developed together with the pupils in the sense of forming hypotheses and activating subjective theories and functionally integrated into the course of the lesson (see also "Activation", p. 16 ff).
- The teacher gives space to the students' questions within the framework of didactic meaningfulness.
- Teachers should be didactically aware of any difficulties that arise that could not be anticipated in the planning.
- The teacher adapts objectives, social forms, methods, work assignments and safeguarding as necessary.

COMPETENCE AND GOAL ORIENTATION





Competence-orientated teaching focuses on the intended increase in learning and competence: What should students able to do? It is based on a holistic concept of competence that includes the content-related, methodological-strategic, social-communicative and personal learning dimensions. In contrast to lessons that focus on the teaching and testing of content, this approach is based on a holistic concept of competence.

(What should be learnt?), competence orientation means thinking increasingly from the end, from the expected acquisition of competence. Learning should therefore lead to application- and action-orientated knowledge as a "skill". Lessons are conceptualised from the respective knowledge and skills of the learners and enable the initiation of individual learning paths.

Activation of prior knowledge

Pupils are better able to assimilate learning content if it is linked to prior knowledge, attitudes, previous experiences and ideas. The concrete anticipation of prior knowledge, attitudes and existing skills enables student-centred teaching and thus subjectively meaningful learning.

- The teacher makes existing knowledge and skills as well as existing attitudes and preconceptions conscious and visible.
- It scrutinises subjective theories in an appreciative and in-depth manner.
- It reveals the meaningfulness and significance of the learning project to the learners.

Task formats / task definition

Task formats and tasks in competence-orientated lessons take into account the respective learning level of the students. They are



designed to match the didactic and methodological decisions,

i.e. their processing serves the intended increase in competence. They emerge from the previous lesson in a recognisable and plausible way for the students. Examples of different task formats are

- The teacher sets tasks to elicit and acquire knowledge and skills.
- It provides practice and backup tasks to consolidate acquired knowledge and skills.
- It sets application and learning tasks to transfer acquired knowledge and skills into a new situation.
- It includes reflection tasks for self-assessment and external assessment of learning growth and learning behaviour in the lessons.

Competence-orientated tasks are embedded "precisely" in a targeted teaching-learning process.

- The task formats used correspond to the respective learning situation and promote an appropriate learning progression with regard to the acquisition of skills.
- The task formats and assignments enable both individual and collective learning progress and dovetail both aspects in a meaningful way.
- The tasks are activating, challenging, comprehensible and formulated in appropriate technical language for the target group.
- Operators are used in the tasks. They are supplemented by information about social forms, time constraints and offers of support.
- The tasks can be divided into consecutive subtasks with different levels of difficulty.

Backup / Exercise

Backup and practice phases serve to ensure, establish and consolidate learning progress. The individual pupils and the learning group as a whole realise what they have already mastered and what still needs to be supplemented, deepened and practised. The following is also used for reassurance



time for explicit practice, some of which can also be embedded in homework.

- The teacher links the securing of results and the exercise examples with the content and methods covered in class.
- Binding learning outcomes are promised or visualised by learners or teachers.
- The teacher designs exercises for individual repetition, review and application
 of the knowledge and skills taught.
- Backup and practice phases are evaluated according to criteria with regard to the learning status and the intended development of competences, and teaching sequences are justified.

Increased learning and expertise

In competence-orientated teaching, learners demonstrate their learning progress (scope, level, etc.) at the end of a course by completing application tasks, which can be designed as written assessments or as action-oriented challenges. The purpose of an application task is to transfer and test acquired knowledge and skills in new learning and action situations. A challenging application situation often requires the following elements: independence, problem-solving ability, change of perspective, relevance to the real world and action-orientation.

- The teacher designs concise and transparent, possibly also differentiating tasks for challenging and activating application situations. These relate to competence expectations, didactic priorities and the learning level of the learners.
- It aligns the didactic and methodological lesson design with the application situation to be mastered.
- It provides scope for practising and consolidating acquired knowledge and skills in order to ascertain the level of learning and as a basis for the application situation to be mastered.
- It provides or encourages criteria-based feedback on the implementation and mastery of the application situation and on the identification of learning progress and learning deficits.

ACTIVATION



Learning as a process on a cognitive. affective. social and motor level requires diverse activation. Different types of learners, each with different prerequisites. represent a major challenge for teachers. Good teaching offers learning arrangements that provide space for activation both in subjective acquisition processes and in COoperative learning and working processes. Relevant, possibly per



Personally meaningful content and challenging tasks create motivation. Supported by a diverse and functional use of methods and media, meaningful and individualised learning is made possible. By encouraging children and young people to be independent and responsible and to experience school learning as a process that they help to determine, schools can an important contribution to a democratic culture.

Cognitive activation

Learning can be initiated by a cognitive conflict, a problem or an experience of difference, each of which is perceived as a challenge.

This puts pupils in a motivated learning mindset. It is the teacher's task to use the problem-orientation as a common thread in the sense of transparency and orientation. The teacher initiates, accompanies and supports the understanding process in meaningful and manageable steps.

 The teacher initiates learning processes, e.g. via a cognitive conflict, a problem/problem orientation or an experience of difference.



- It provides space, suggestions and challenging tasks for pupils so that they can develop their own ideas, concepts and solutions.
- It helps to relate to each other and, if necessary, asks for arguments and reasons.
- It demonstrates an open attitude and a flexible approach to (thought) experiments, detours, discussions and unconventional and creative solutions.
- She consciously incorporates interim balances and meta-reflections.

Motivation

Motivation is the driving force behind learning. According to studies by Deci and Ryan, the central factors for motivation are achievable goals, the experience of autonomy in the learning process and social integration.

- The teacher consciously selects content and learning objects with a view to relevance and educational content.
- It provides targeted impulses or designs teaching phases with a view to motivation.
- It provides challenging stimulation for all learners at a level that suits them.
- It makes the achievability of the goal visible through the perception and communication of successful partial steps in a learning process.
- Learners are taken seriously and valued. Their efforts and results are recognised. Confidence in their abilities becomes clear to them.
- Learners experience learning processes as co-designable.

Methods, media and social forms

The learning arrangement for a productive teaching-learning process is consciously designed on the basis of the didactic objectives through methods, media and social forms and consistently follows the analyses of



Learning behaviour and learning level. Forms of direct instruction are central to the pure transfer of knowledge (e.g. information transfer of facts and specialist knowledge as input from the teacher; also via the reception of specialist literature), while open forms of teaching are more suitable for appropriation, forming judgements and adopting other perspectives. In many cases, it makes sense to give space to subjective appropriation or development processes, i.e. individual phases of thinking. A fundamental principle of sustainable learning phases is therefore the sequence of steps

"Think - Pair - Share" or "Think - Exchange - Present" is practised, which leads to a cooperative process after the individual thinking phase via the exchange and presentation phases. Cooperative forms of learning enable more complex learning experiences and processes of competence acquisition, but also require more effort and time. This requires the teacher to make a carefully considered decision.

- The teacher pays attention to the suitability of methods and media to the didactic and pedagogical objectives and to their appropriate and functional use.
- Within the fit, there is a variation of methods, media, social forms, task types and approaches in the sense of broad learning type activation and stimulating diversity in the learning arrangement.
- The gradual development of methodological and media skills is initiated and supported, and various forms of presentation are specifically integrated.
- In the preparation and implementation of the use of methods and media, the cost and return are proportionate.
- The teacher consciously integrates phases of instruction, construction and coconstruction.
- It pays attention to the consistent integration and implementation of concentrated individual work phases to realise the pupils' individual thinking time in preparation for different forms of development, e.g. a productive group process.
- It accompanies the communicative exchange between the learners in the "Pair" phase with the aim that all students are ready and able to present the results; it avoids unnecessary interventions.
- She leads the presentation phase of the group results in a structured manner and ensures that the central results are discussed and secured.



 Pupils are familiar with the procedures and rules for individual, partner and group work and these are bindingly adhered to.

Participation

The aim of participation (inclusion, involvement, co-determination) of pupils is to educate them to become sovereign, self-confident and responsible personalities. Lessons should enable pupils to have a serious say, genuine participation and the assumption of responsibility and thus also to learn democracy.

By experiencing their school as a place to learn and live and themselves as active participants with room for manoeuvre, pupils gain satisfaction and confidence in their own abilities. On the other hand, there is a stronger identification with school and lessons, which leads to greater commitment, better results and thus also to a more positive self-concept on the part of the pupils.

Last but not least, participation offers the opportunity to discover one's own potential and that of others, to develop creativity, to dissolve entrenched structures and to strengthen the sense of community.

- Pupils are encouraged to develop their own questions and individual projects, to make their own contributions and to come up with ideas for action and solutions that are meaningfully embedded in a joint working context.
- They are specifically involved in processes of goal orientationcontent prioritisation and in the conception and design of learning arrangements.

STRUCTURE/ TRANSPAREN



Transparent lesson objectives structured lesson organisation are conditions hasic for successful learning arrangements. As a rule. lessons are centred around a subjectrelated learning objective or project resulting from the subject analysis, which is clearly presented to the pupils the beginning of the lesson or developed together with them. The organisation of the lesson in terms of content, method and time is derived from this context

Clarity of objectives and procedures

Learning opportunities are utilised more efficiently and with greater motivation if learners can see the goal and the way to achieve this goal in the lesson. Pupils recognise the meaningfulness of the coordinated teaching steps in terms of content and method and acquire skills to acquire knowledge and solve problems.

- The introduction to the lesson or the introduction results in a meaningful goal orientation, e.g. through a jointly developed problem.
- Learners are informed about the content and the planned course of the lesson and about the connection between objectives and requirements.
- Teaching objectives and competences to be acquired are explained and justified or developed and agreed in a comprehensible manner.
- Process transparency (how and with what to work) is established.
- The importance of the lesson and the context of the teaching unit are recognisable.
- Learners can explain what they are doing and what objective they are pursuing.



Coherence / phase linking

Coherence describes how well teaching steps, materials, work assignments, social forms, methods and dialogue are aligned and coordinated with the intended objectives.

- The lessons are divided into meaningful phases that build on each other.
- The lessons are organised in a technically coherent way.
- The phase transitions are explained in a meaningful way.
- The teacher gives structuring instructions and work assignments.
- A recognisable common thread runs through the lessons and links the previous with the following.

Differentiation between learning and performance situations

In order to build up skills and acquire knowledge in the long term, learners must be able to practise, test themselves and learn from mistakes without being assessed negatively. Performance situations must therefore be distinguished from learning situations and labelled accordingly. Assessment is based on performance expectations that have previously been made transparent.

- There are assessment-free spaces for learners in which they can test their skills without the pressure of assessment and learn without fear.
- Performance expectations are discussed with the learners and made transparent.
- Performance assessments are based on the performance expectations discussed.

Transparent dialogue structure

Comprehensible, target group-appropriate language and a structured and goalorientated approach to discussion by the teacher help to achieve clarity with regard to the initiation, implementation, evaluation and safeguarding of learning processes.



- The teacher's language is comprehensible (short, simple sentence structures, familiar language, explanation of technical terms) and concise (brief presentation, focussed on the essentials).
- Phase transitions are justified and explained.
- Work assignments are clearly formulated, teacher presentations are well structured.
- Media are in a targeted and illustrative way.

LEARNING PROCESS SUPPORT



With а view constructivist learning associated theory. the on the focus learning process, the autonomy of the learning subject and desirable the shared responsibility for the learning process, the role of the teacher changes in interplay with the role of the learner. In the sense of Andreas Helmke's offer-utilisation model. teachers create learning arrangements for learners who, based on their prior knowledge and dispositions. consciously and

The students also unconsciously choose individual approaches and carry out different learning processes. The phases of this processuality are depicted in the

"Process model to support the development of teaching" (see bibliography). The relationship between teachers and learners is of the utmost importance for successful learning.

Role of the teacher

The roles of the teacher in the learning process are diverse, e.g. expert, learning initiator, instructor, moderator, learning guide, counsellor, assessor, etc. - all roles that specifically involve the responsibility of the students. The authentic and competent acceptance of the role arising from the learning situation is decisive for the success of learning processes.

 The work process and the results of the same are continuously diagnosed by teachers and/or learners.



- The teacher is characterised by professional role awareness and role-taking in accordance with the learners and the situation.
- Assessment and evaluation take into account the students' self-assessment and external assessment.

Feedback

Feedback as conscious communication about self-perception and the perception of others is of central importance for teaching and learning processes. Correctly given feedback strengthens the learners, gives them (and vice versa the teachers) orientation and promotes motivation and self-efficacy. The Hattie study (see bibliography) ranks feedback as one of the most important factors influencing learning success at school and identifies it as a central instrument of "visible learning". Reciprocity is of great importance here: the feedback that pupils give the teacher on their own learning process (what is received and how?) is just as important in the school context as the feedback that teachers give to learners. As part of a sustainable feedback culture, feedback is practised systematically and bindingly, and as many participants as possible take responsibility in this process.

- Teachers and learners, as well as learners among themselves, regularly give each other constructive and critical feedback within a learning process based on an appreciative attitude.
- Rules for giving and receiving feedback are consciously taken into account.
- If possible, feedback is provided promptly, concretely, differentiated, on behaviour that can be changed and is strength-oriented.
- Ideally, concrete feedback is supplemented by specific instructions for further work (feed-forward), which, wherever possible, build on existing strengths and focus on clearly defined goals.

Dealing with diversity

School is characterised by diversity: People from different backgrounds and religions, of different genders, with different previous experiences and pre-concepts, dispositions and interests live, learn and work together. Understanding diversity as a challenge and an opportunity is not least a question of attitude that is relevant to education policy. Openness and curiosity towards



This attitude is characterised by diversity and the desire to perceive, understand and make fruitful use of differences. It is therefore fundamental for successful teaching/learning processes in terms of democratic learning and for promoting creativity, innovation and motivation.

- The teacher pays attention to the perception and appreciation of diversity and heterogeneity in the learning group.
- It practises continuous diagnosis at specialist and interdisciplinary levels.
- It creates differentiated learning opportunities and encourages pupils to participate according to their different levels of performance, abilities and interests.
- It recognises learning obstacles and learning opportunities, makes pedagogical and didactic decisions and sets requirements in line with the learners.
- She practises targeted challenge and support.
- As a role model, she exemplifies values such as respect and tolerance and consciously communicates them.
- It promotes the learners' social and personal skills.

Self-directed learning

Independence and taking responsibility for one's own learning process play a decisive role in learning success. Self-directed learning is aimed at learning processes in which "the learner can have a serious and far-reaching influence on the key decisions as to whether, when, how and where to learn" (Weinert 2001). The aim of self-directed learning is to develop individuality and authenticity and to develop skills and abilities. To do this, learners need space and, if necessary, support. Although self-directed learning in the school context remains a goal that is difficult to achieve in its pure form, especially for those starting out on their careers, the degree of independence that teachers allow their students is a quality feature of good teaching.

- The teacher consciously gives the pupils space for independent and autonomous learning in accordance with the competences they have already developed.
- She has model ideas about strategies for self-regulating learning and communicates these.



- It provides individual support in the learning process through direct instruction, co-operative forms of work, individual attention and reflection and combines this with feedback.
- In this way, pupils are strengthened in their ability to self-assess and can therefore choose learning paths and set priorities more consciously.

CLASS GUIDE



"Efficient classroom management is not an end in itself, but an for indispensable prerequisite ensuring high-quality teaching. It controls the active learning time, i.e. the time in which the pupils engage with the content to be learnt in a committed and constructive manner. Alonaside diagnostic, subject-specific and didactic competence, it is regarded as one of the basic competences of the teaching profession" (Helmke 2007, p. 44).



The term "classroom management" refers to the interplay of a comprehensive repertoire of action strategies and at the same time teacher attitudes that contribute to a favourable learning environment and prevent classroom disruptions (aspect of prevention).

Perception of the learning group

 The teacher perceives student behaviour (body language, participation, restlessness, etc.) as feedback on the intended learning and working process, interprets this appropriately and reacts flexibly.

Rules and routines

- The teacher develops and changes clear rules (and consequences) together with the learning group, which a fixed framework for action, but at the same time allow room for individual development.
- It ensures that the existing rules are adhered to consistently and in good time.
- It implements the appropriate consequences in the event of violations.



 She has a diverse repertoire of rituals and routines (in the sense of ritualised action sequences) and implements these regularly and functionally in lessons.

Time utilisation

- The teacher uses the available learning time effectively with the learning group.
- It makes phase transitions fluid and transparent.
- She can organise work in different social forms smoothly, i.e. she can quickly manage the use of media, group assignments, distribution of materials, etc.
- She organises timely and appropriate exits from lessons according to learning progress.

Intervention in the event of disruptions

- The teacher recognises disruptions in good time.
- She intervenes verbally and non-verbally to quickly restore attention.
- She uses effective strategies (on different levels) to effectively end a conflict situation in front of the class and find sustainable solutions.

Climate conducive to learning

- The teacher guides concentrated individual and cooperative learning processes in a classroom atmosphere characterised by support, friendliness and mutual respect.
- It ensures clarity of work assignments and commitment in the work process.
- She ensures an appealing environment (seating arrangementsclassroom design, etc.).

DIALOGUE MANAGEMENT





In addition to open forms of teaching and a variety of methods, the class discussion (also class discussion) as a goal-orientated subject-related discussion in which problems are worked out, solutions are developed and work results are presented, discussed and weighted, continues to be a central form of teaching/learning. The success of this very demanding and difficult form of teaching is particularly dependent on

is determined by the quality of the dialogue conducted by the teacher, whose task also consists of establishing a positive culture of dialogue in the respective learning group in a long-term process using reflection processes. In this context, the teacher's attitude is characterised by a willingness to communicate, openness, flexibility and authenticity (cf. teacher personality indicators). In addition, the use of dialogue techniques (e.g. passing on, mirroring and bundling contributions) is of great importance. The aim should be a student-orientated, guided classroom discussion in which the rules of discussion are observed, the direction, the central theme and the structure of the discussion are clear to the students, the whole group remains in view and students can directly relate to each other with their contributions, which then meaningfully linked and weighted by the teacher. All of this can therefore lead to a high level of student activation (see indicators for activation, p. 16 ff.).

Levels of dialogue management

Successful dialogue management is particularly evident in non-verbal and verbal actions and in the teacher's concentrated attitude. The decisive factor here is the creation of a positive dialogue atmosphere, which can be seen in the following aspects of non-verbal and verbal conversation, among others:

Non-verbal dialogue

• The teacher practices active listening (signalling attention and patience, making eye contact with the whole group and the speaker, notes if necessary).



- She pays attention to appropriate positioning in the room.
- She pays attention to the conscious use of the voice: Intonation, modulation, dynamics.
- Mimic and gestural signals are also used consciously.

Verbal dialogue

- The teacher formulates clear, open impulses and questions using operators.
- If necessary, it focusses on the central issue of the conversation.
- It gives sufficient time for reflection (waiting, mumbling phase, notes ...).
- She consciously reduces her own speaking parts, e.g. by opening up the conversation (passing on pupils' contributions, not answering immediately, accepting further contributions).
- She gives differentiated feedback on student contributions (clearly emphasising suitable parts of student answers, targeted, measured and differentiated praise, linking and nuanced weighting of student contributions, clear feedback on what has succeeded and failed, request for concretisation, illustration, conciseness of contributions, linguistic clarity, proof of the statement in the text, correction/partial correction, etc.).

Networking and security

- The teacher discusses the results presented.
- It links and prioritises the contributions.
- It enables newly acquired knowledge to be linked with previous knowledge.

Assessment / meta-reflection

- The reference back to the key question is established.
- The teacher deliberately provides space for taking stock.
- Reflection and communication about the learning process and the culture of dialogue in the learning group take place.

REFLEXION

The reflection of a lesson is the active examination of experiences and the analysis of observations and perceptions that a teacher has made in the previous lesson. In the sense of a scrutinising observation, the teacher takes a *structured* and criteria-oriented view of the teaching arrangement and the teacher's teaching methods.

-The teacher takes a look at the interaction between teacher and pupil and becomes aware of relevant strengths and weaknesses in terms of planning and implementation. Reflection immediately after a lesson is therefore an essential part of the learning process.



It forms the basis for the development of their own teaching and is an important component of professional teacher work. Teachers are thus empowered in an active, self-directed learning process to review, safeguard and further develop the quality of teaching.

Following a lesson visit, pre-service teachers first need time to reflect on their experiences and perceptions of the lesson. Among other things, the comparison of planning and execution as well as the assessment of the learners' growth in competence should play a role here. From the analysis, the teacher develops sensible alternatives and consequences for further work. The teacher also takes a look at their own actions and behaviour: Were intentions realised? What strengths have become visible? Where is there a need for development?

The teacher's *self-perception and situational awareness* is further differentiated and supplemented by appreciative feedback from the trainers. At the end of the counselling session, key points are recorded in the form of a joint summary and a resolution. These include realistic next steps for further work in the sense of a self-effective process.

The ability to critically analyse one's own teaching practice is an essential prerequisite for the further development of professional teacher action. The conscious integration of reflective processes in schools and seminars supports the ability to perceive oneself and others as the basis for lifelong learning.

BIBLIOGRAPHY

I. General literature

Office for Teacher Training Hesse: On the way to competence-orientated teaching - designing teaching and learning processes. A process model to support lesson development. Wiesbaden 2011.

Arnold, Rolf: I learn, therefore I am. A systemic-constructivist didactics. Carl-Auer, Heidelberg ²2012.

Bauer, Joachim: Principle of humanity. Heyne, Munich 2008.

Bauer, Joachim: Self-control. The rediscovery of free will. Blessing, Munich 2015.

Bauer, Karl-Oswald: Measuring pedagogical quality. A handbook. Waxmann, Münster 2010.

Bovet, Gislinde; Huwendiek, Volker: Leitfaden Schulpraxis. Pedagogy and psychology for the teaching profession. Cornelsen Scriptor, Berlin 2008.

Hasselhorn, Marcus; Gold, Andreas: Educational psychology. Successful learning and teaching. Kohlhammer, Stuttgart ³2013.

Hattie, John: Making learning visible. Schneider, Baltmannsweiler 2013.

Hattie, John: Making learning visible for teachers. Schneider, Baltmannsweiler 2014.

Helmke, Andreas: Teaching quality and teacher professionalism. Diagnosis, evaluation and improvement of teaching. Klett/Kallmeyer, Seelze ⁶2015.

Hessian Ministry of Education and Cultural Affairs: Hessian Reference Framework for School Quality (HRS). Quality areas, quality dimensions and quality criteria. 2011.

Heymann, Hans Werner; Siewert, Jörg: The art of improvisation. Flexible, situational and intuitive behaviour in the classroom. In: Pedagogy. Beltz, Weinheim 2017¹.

Meyer, Hilbert: What is good teaching? Cornelsen, Berlin ¹¹2016.

Schaarrschmidt, Uwe et al: Teaching aptitude. Recognising prerequisites, promoting skills, shaping conditions. Kohlhammer, Stuttgart 2017.

Terhart, Ewald: The Hattie study under discussion. Making problems visible. Klett/ Kallmayer, Seelze 2014.

Wahl, Diethelm: Successfully designing learning environments. From inert knowledge to competent action. Klinkhardt, Bad Heilbronn ³2013.

Wellenreuther, Martin: Teaching and learning - but how? Empirical-experimental research on teaching and learning in the classroom. Grundlagen der Schulpädagogik, vol. 50. Baltmannsweiler 2013.

II. Special literature on individual dimensions and criteria

On the subject of competence orientation in general:

Meyer, Hilbert: What is competence orientation? In: School management. Oldenburg Klick, Munich 2010⁶.

Tschekan, Kerstin: Competence-orientated teaching. A didactic approach. Cornelsen, Berlin 2011

On the topic of activating prior knowledge, attitudes and competences:

Asshoff, Roman; Hammann, Marcus: Pupils' perceptions in biology lessons. Causes of learning difficulties. Klett/Kallmeyer, Seelze 2014.

Brand, Tilman von: Teaching German. Introduction to planning, implementation and evaluation in secondary schools. Klett/Kallmeyer, Seelze 2013.

lexikon.stangl.eu/187/cognitivism. Last accessed 23 February 2017.

On the subject of task formats / task setting:

Keller, Stefan; Bender, Ute (eds.): Task cultures. Challenging, accompanying and reflecting on specialised learning processes. Klett/Kallmeyer, Seelze 2012.

Reisse, Wilfried: Competence-orientated task development. A teacher's handbook for secondary schools. Auer, Cologne 2008.

On the subject of exercise / backup:

Gudjons, Herbert: Methods and strategies of intelligent practice. In: Pedagogy. Beltz, Weinheim 2005¹

Heymann, Hans Werner: Practising and repeating - a new look. In: Pedagogy. Beltz, Weinheim 1998¹⁰.

Heymann, Hans Werner: What makes practising "intelligent"? In: Pedagogy. Beltz, Weinheim 2005¹¹.

Renkl, Alexander: Automation alone is not enough. Practising from a cognitive-psychological perspective. In: Friedrich Jahresheft. Friedrich, Seelze 2000⁸.

On the subject of application:

Wellenreuther, **Martin:** Research-based school pedagogy. Guidance on the use of empirical research for school practice. Schneider. Hohengehren 2009.

On the subject of activation:

Heymann, Hans Werner: Why should lessons "cognitively activate"? Stimulating in-depth, understanding, networked learning. In: Pedagogy. Beltz, Weinheim 2015⁵.

Kersten Reichl: Methodenpool. http://methodenpool.uni-koeln.de/. Last accessed 23 February

On the subject of co-operative learning:

Brüning, Ludger; Saum, Tobias: Successful teaching through cooperative learning. Vol. 1. Strategies for activating pupils. Neue Deutsche Schule Verlagsgesellschaft mbH, Essen 2009.

Brüning, Ludger; Saum, Tobias: Erfolgreich unterrichten durch kooperatives Lernen. Vol. 2: New strategies for activating pupils. Individualisation - performance assessment. School development. Neue Deutsche Schule Verlagsgesellschaft mbH, Essen 2009.

Brüning, Ludger; Saum, Tobias: Successful teaching through visualisation. Graphic structures with co-operative learning strategies. Neue Deutsche Schule Verlagsgesell- schaft mbH. Essen 2012.

Green, Norm; Green Kathy: Cooperative learning in the classroom and in the classroom. The training book. Kallmeyer, Seelze 2005.

Huber, **Anne A.** (ed.): Cooperative learning - no problem. Effective methods of partner and group work (for schools and adult education). Klett, Leipzig 2009.

Konrad, Klaus; Traub, Silke: Kooperatives Lernen Theorie und Praxis in Schule, Hochschule und Erwachsenenbildung. Schneider, Hohengehren 2008.

Lanphen, Judith: Cooperative learning and integration support. A theory-based intervention in ethnically heterogeneous school classes. Waxmann, Münster 2011.

Project CoMet: Co-operative learning methods - On the road with CoMet. Studienseminar für Gymnasien Marburg, Marburg 2014.

Weidner, Margit: Co-operative learning in the classroom. The workbook. Kallmeyer, Seelze 2003.

On the subject of learning process support:

Heymann, Hans Werner: Independence grows from self-activity and self-confidence. What teachers can do for this in the classroom. In: Pedagogy. Beltz, Weinheim 2015².

Weinert, Franz E.: Performance measurement in schools. Beltz-Pädagogik, Weinheim and Basel 2001.

On the subject of feedback:

Bastian, Johannes et al: Feedback methods. Beltz, Weinheim 42016.

Berger, Regine et al: "Why don't you just ask us?": Teaching effectively with student feedback. Beltz, Weinheim 2013.

Brookhart, Susan: How do I tell my student? How your feedback really gets through. Beltz, Weinheim 2010

Fengler, Jörg: Rath, Ulrike: Giving feedback, Strategies and exercises, Beltz, Weinheim 2009.

