
DIDACTIC TEACHING STRATEGIES FOR SUCCESSFUL LEARNING

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Abstract: The success of teaching-learning is defined by the mutual interaction of a number of factors, one of the most important being the didactic strategy employed by the teacher. This study will give an overview of the most important types of didactic teaching strategies and their genesis as well as present possible subject-specific applications of these strategies. It will also answer the question what influence the didactic teaching strategies have on the students' personality.

Key words: empirical strategy, problem-solving strategy, modelling strategy

Introduction

The same objective may be achieved in a variety of ways during the process of teaching-learning. We do not follow different paths out of some gratuitous need for variety, much rather we insist on a range of teaching-learning methods because of scientific exigency and expeditiousness. It has been proven from an epistemological and psychological perspective that the various learning strategies lead to different learning results, as it has also been demonstrated that the different learning contents can be processed through different learning paths and with varying efficiency. As long as the successful realisation of educational objectives is at stake, disciplinary methodology and didactics cannot ignore which teaching-learning paths and methods lead to the predefined objectives. Despite still being in its infancy, teaching-learning strategy is one of the most fundamental methodological categories, which has been defined with the appearance of specialisations in the field of didactics and the emergence of didactic and disciplinary research within the pedagogical scientific framework.

1. What do we mean by teaching-learning strategy?

It has transpired from the introductory notes that the optimal paths and methods should be considered when exploring the question of strategies. We should think of "scripts" that reveal how the pre-specified objectives can be achieved: how knowledge can be obtained, how concepts can be shaped, how a knowledge system can be constructed, how the applicable knowledge can be moulded, how skills, proficiencies and abilities can be developed.

When defining teaching-learning strategies, Sándor Nagy emphasises that the student is able to construct his/her fundamental thinking-learning operations and arrives at a stage where s/he will be able to efficiently apply the same in different situations. Thus, the teaching-learning strategy becomes the student's learning strategy (Nagy, 1993, 46).

The strategy is such a complex system of methods, tools, organisational styles and forms aimed at achieving goals which is based on a coherent theoretical basis and which has a particular syntax (the definition and given order of executable steps) and is realised in a particular learning environment (Falus, 1998, 274). It is clear from the definition that while teaching content answers the questions "What shall we teach?," strategy reveals "How we should teach?," yet it is not to be confused with the concept of method. For strategy does not refer to the organisation and realisation of a short educational moment, rather it is a long-term paradigmatic direction, perhaps covering several lessons. The paradigmatic nature means that strategies are always constructed according to the philosophical, logical or psychological theories of learning and knowing. Devising the content for a subject like

Communication also raises the issue of paradigms, although it has to be clear that apart from the science logical paradigms, learning theory paradigms also play a crucial role when devising and processing the content for school materials. The mutual relationship between the paradigms of the logic of science and theories of learning poses a separate problem which is primarily faced by coursebook writers and teachers organising and realising the process of teaching-learning.

A strategy is a long-term definition of a general direction that encompasses design, supervision, management as well as the system of the applied processes and their appropriate instructions. In general, the management and supervision of several areas of the economy and society presuppose the design, organisation, direction, monitoring and evaluation of the given activity, namely, the development of a comprehensive strategy considering the functioning and operation of the entire system. Therefore, we can state that strategy is a category in a general methodological sense.

When examining the nature of the strategies in the teaching-learning, we have to uncover the effective ways and means of the functioning and operating of the educational process which lead to the successful realisation of the didactic activity. We have to construct such teaching-learning models that are supported by well-defined learning theoretical paradigms and facilitate the processing of educational content in the interest of the predefined objectives. Thus, strategies are well-defined means of activity orientating the process of learning which, due to their internal logic, allow for the selection and construction of methods, tools, processes and organisational forms while represent a fundamental pedagogical approach (Ferenczi and Fodor, 1996, 82-84)

1.1. Empirical strategy

Educational strategies were brought along by the discovery that learning can be realised through a variety of ways, down various paths with different results. The fundamentals of empiricism were defined by English empirical philosophers, such as Francis Bacon or John Locke, in the 17th and 18th centuries. They believed that human acquisition of knowledge is but the reception of reality surrounding man through the senses. The main source of knowledge is experience, we become to know the world and acquire knowledge through our senses. While accruing the simple facts and phenomena of reality, man is simultaneously obliged by the same facts and phenomena to realise connections and, based on these, to deduce generalisations and abstractions. This is how concepts reflecting reality and the relationships within reality and, in turn, further generalisations lead to the discovery of laws and principles. In this experiential philosophy the criterion of the truth of knowledge is empirical confirmation, namely, all knowledge is true which holds up to empirical testing. Man analyses experience gained through perception, therefore the process of experiential learning is inductive, and acquiring knowledge is considered to be moving from the simple to the complicated, from the particular to the general, from the concrete to the abstract (Figure 1.) (Nahalka, 2001, 205).

Empiricism is the first epistemology, theoretical framework for the description of knowledge and learning, which, apart from having generated still solidly holding views and methodological processes in pedagogy, has provided a complete theoretical paradigm for the construction of didactics. The systematic pedagogy based on empiricist epistemology was constructed by Herbart in the 19th century. He defined the process of learning in the following stages:

- a) The teacher presents the concrete manifestations of the new knowledge, which Herbart calls static reflection.
- b) The crystallised concept clusters soon propel into action the concepts already stored in the consciousness. This upsets the existing order and – through association – similar concepts from the old and new stock come into contact with each other. This is the dynamic phase of reflection.
- c) The concept clusters reinforced by the associations come into contact with the concept clusters already embedded into the consciousness plane. This is static consciousness.
- d) The new concept cluster takes root properly when the consciousness plane is reactivated: the new concept cluster collides with the already embedded concept clusters through comparison, application and practice. This is what Herbart calls dynamic consciousness. (Mészáros and Németh and Pukánszky, 2000, 146-152). Although Herbartian pedagogy has been widely criticised, it has influenced educational practice up until today. Nowadays one of the most frequently used educational

strategies applied in teaching communications derives from this pedagogical paradigm: empirical strategy.

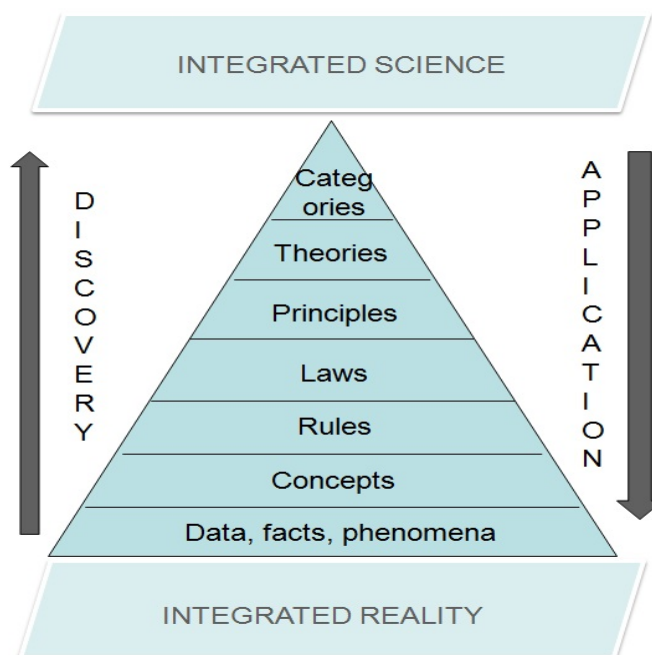


Figure 1. The process and system of acquiring knowledge according to objectivist theory of knowledge

We often see that a teacher instinctively applies this strategy without previous planning or preparation, and can do so because the knowledge theory strategy is very close to both the natural form of human knowledge acquisition and the characteristics of scholarly learning (Falus, 2003, 243-293., Ollé, 2010, 137). It can also be observed that whether the teacher centres on his/her own activities or focuses on learners' activities when applying the strategy result in very different learning experiences. In the case of the latter, the learner profits much more from the teaching-learning strategy since s/he can be the protagonist of his/her own learning/knowledge acquisition activity. Due to the influence of the activity-centred paradigm, these days this latter form of the empirical strategy could be more recommended for didactic activities.

A teacher of communication will shape the knowledge theory strategy in the following steps:

- Collection of factual material – recognition of the basic concepts of the studied phenomenon in concrete situations, observation, recognition and focus on typical characteristic and facts arising from the situations. (For example, viewing a communicative situation in a short film extract together with the students at the beginning of the lesson then observing and recognising the studied phenomena in this situation.)
- Conceptualisation – definition of new concept as a result of observing facts and phenomena (for example, the definition and naming of the recognised phenomenon – strategy of cooperation)
- Repetition and classification – categorisation of the studied and recognised phenomena and concepts according to new, higher levels of abstraction, that is to say, this is not a simple regurgitation of the material learnt in class.
- Application and practice – the practical application of the recognised and acquired concepts, rules and laws with the aim of turning this application into skills (for example, the analysis of communicative situations according to types of communicative problems).
- Assessment and evaluation – a didactic momentum of feedback and regulation which informs both the learner and the teacher about how the learner's knowledge has been shaped during the learning process (knowledge, skill, proficiency and ability system). At the same time the performance also reflects the efficiency of teaching-learning provided it is not a product of the learner's individual efforts, but it also depends on the quality of the tasks organised by the teacher and completed by the learner community.

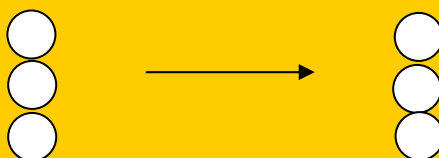
As an example, let us review the following empirical strategy plan for the curriculum section on “The perfection of self-recognition” (Dr. Raátz Judit and Dr. Szóke-Milinte Enikő. 2010. *Üzleti kommunikáció*. Budapest: Nemzeti Tankönyvkiadó. 123-127).

1. At the beginning of the class the teacher offers the students various communicative situations for analysis with the aim that the students collect sufficient and adequate material regarding the phenomena under examination.

Situations	Teachers' questions
Vender: I'm sorry, we don't have millet cake. Customer: What a place! Let's go.	How would you qualify the Customer's communication? How does s/he react? Who and when will react in a similar manner? What kind of Customer will communicate like this?
Vender: I'm sorry, we don't have millet cake. Customer: That's a pity/So am I.	How would you qualify the Customer's communication? How does s/he react? Who and when will react in a similar manner? What kind of Customer will communicate like this?
Vender: I'm sorry, we don't have millet cake. Customer: Well, a patisserie with such reputation perhaps should pay more attention to market demands.	How would you qualify the Customer's communication? How does s/he react? Who and when will react in a similar manner? What kind of Customer will communicate like this?

2. The teacher names the Ego-States which are defined together with the learners also describing the characteristics of the various Ego-States. The teacher presents Berne's personality model and the concept of transaction, that is, s/he completes conceptualisation in this strategic stage.

3. Repetition and classification happens through the presentation of the transactional model of the previous communicative situations where the learners, supervised by the teacher, can discover the dynamics of the situation, identify the communicators' transactions and Ego-States (draw the missing transaction and identify the communicator's Ego-State: child, adult, parent).



I'm sorry, we don't have millet cake.

What a place! Let's go.

4. During the stage of application and practice, the learners have to recognise the concepts they have acquired in a new communicative situation and analyse the situation with the use of these concepts.

Please read the following dialogue!

At the customers services of a cable television service provider:

Client: What were you thinking? You can just cut the service without any notice? Without a word?!

Customer service representative: You haven't fulfilled your responsibilities signed in the contract, and haven't paid the service charges for over three months.

Customer: Maybe because I've never received the bill!!

Customer service representative: ...

Consider how the customer service representative would reply in different Ego-States?

- As a critical parent
- As a rebellious child
- As an adult

Discuss which answer would be the correct one from a communicative perspective! Why?

5. The teacher assigns a new communicative situation as homework and asks the learners to give a transactional analysis of this situation.

The stages of empirical strategy together with a learner-centred approach can lead to impressive results in teaching communication. What does this mean? The learners collect, classify and evaluate the factual material, they may assume conceptualisation tasks, they repeat and classify the newly acquired knowledge in new task situations according to new perspectives, then apply and practice the same in particular situations and reflect on their own and others' activities. The teacher coordinates, supervises, assists, facilitates, complements the learners' activities as well as draws attention to particular points and evaluates their performance.

1.2. Problemsolving strategy

At the beginning of the 20th century there was an upsurge in the research on learning and acquisition and complex learning theories were born. One of the most important psychological epistemologies is associated with Piaget who considered activity in a psychological sense, which comprises psychological operations and actions, the key condition of the development of mental abilities. In his theory, Piaget uncovers the similarities between material and intellectual activities as well as the presumable identities of development, and describes the mental operations and their developmental stages. He illustrates two essential processes of mental assimilation, which are: the process of incorporation of a new element (piece of information) into the already existing psychological scheme (system); and accommodation which is the integration (framing) of the existing psychological schemes (structures) to the new element (piece of information), which results in the restructuring of the psychological structure (Piaget, 1997, 19-22 and 142-152). Thus, it is the learning individuals' activity takes centre stage. At the same time it is worth considering that the description of the endeavour to achieve a balance between the organism and its environment goes far beyond the recognition of the significance of the activity and projects the process of mental construction which forms the basis of cognitive sciences.

Early cognitive psychology contributed to the emergence of the various schools of thought on acquisition by interpreting the operations of human reason as information processing. The human mind features as a problem-solving being that manipulates symbols and reacts to the changes of the outside world in an intelligent manner. The first cognitivist definition of problemsolving can be attributed to Newel and Simon who considered the importance of the recognition and analysis of the problematic situation. They believed that a number of stages were necessary to solve a problem, including: the collection and examination of data, the construction of solution plans and their testing, empirical revision and, finally, the actual solution of the problem (Nahalka, 2001).

The learning theoretical paradigm, which has become to be known as action psychology, as well as the early cognitivist knowledge theoretical paradigm together form the basis of an important teaching-learning strategy which has emerged in pedagogy, namely, problemsolving strategy (Nagy, 1993, 46-54, Falus, 2003, 243-293.). A fundamental characteristic of human thinking and learning is that it is unsettled by an unknown environment, and that it poses questions with regard to the subject of learning, and subsequently acquires new knowledge by seeking out and defining new possible answers. It is easy to acknowledge that the attitude of learning is necessarily the attitude of raising the problem.

It is a characteristic of the problem that already existing system of knowledge and skills is insufficient for the resolution of the problem and for the answering of the basic problem question. Therefore, the learning subject is necessarily obliged to acquire new knowledge, to navigate new (heuristic) mental paths and to discover new solutions. Eliminating the problematic situation or solving the problem can only be achieved through mental effort and extra labour.

Apart from requiring mental involvement, another significant virtue of the problemsolving strategy is that the moments of recognition and application cannot be separated, since the approach is rooted in the learning nature of the activity. An active acquisition of knowledge presupposes rediscovery and the passage through the various stages of learning, that is, the completion of such mental operations and actions through which new information can be obtained and new connections can be recognised.

The application of the strategy is complicated by the fact that it is difficult to make the possible problems uniform in the sense that it depends on the individual's development what constitutes a

problem (there are children who will not consider the proposed problem a problem anymore, and there are others for whom it is still not a problem). Therefore, besides differentiation, the question of motivation becomes significant in the applicability of the problemsolving, since the problematic situation presupposes much more complex psychological structures and operations, and the problem may present as a serious source of conflict for the learner. The learner has to be stimulated to use the tension positively and to endure the sometimes long and arduous journey that is problemsolving.

The stages of problemsolving teaching-learning strategy are as follows:

- The creation of a problematic situation
- The analysis and synthesis of the problem, the definition of the key problem question
- The construction of the problemsolving plan
- The recognition of the unknown in the problem
- The execution of the corrections arising during the process of problemsolving
- The synthesis of the information obtained during the parts of the problem
- The answering of the key problem question
- The outlining of the new problem (Ferenci and Fodor, 1996)

The process of problemsolving presupposes divergent thinking and the construction of heuristics plans which do not prescribe strict rules and a definitive order of the various stages, but rather presuppose originality, free combinative possibilities and creative imagination. During the process of searching for the solution the learner actively processes and rediscovers the information, which presupposes devising learning content according to task and problem systems. The strategy also earmarks a particular role for the teacher: s/he coordinates, organises and manages the process of problemsolving and makes the learner recognise the problem as well as the various stages of the problemsolving process.

Let us review the possible applications of problemsolving with the aid of an example. The subject of the lesson: "Preparation for effective communication" (Type of school: vocational secondary school, Year: 2, Subject: Business Communication). The process of teaching is as follows:

Watching a film about Sándor Csányi (Kiút ("Way out") –Sándor Csányi, bank CEO, Kettőspont Alapítvány és a Kultindex Nonprofit Kft. 2010. <http://www.youtube.com/watch?v=EP71DOXfgKY>, accessed 01.11. 2013.)

Key problem: *Under what conditions can someone become a successful person?* During the class discussion learners define the answer. In case they need assistance, the teacher may help with the definition of the problem.

Prior to studying the chapter, immediately before class, the students carried out a case study in groups and completed the following tasks:

1. Collect data about childhood and studies of the individual under study!
2. Collect as much data as possible about his/her professional career! Study his CV!
3. Look for a video about the individual in question and try to assess his/her temperament, special skills, particular knowledge!
4. Look for interviews with the individual in question! Based on these, identify his/her interests and beliefs!
5. Look for information on the internet which sheds light on his/her future plans!
6. Collect information from which you can deduce his/her attitudes!
7. Determine how many roles this individual plays at the moment!
8. Find some examples to support how s/he is success-oriented!
9. Collect information about his/her role models and best connections from the interviews, CV or other sources!
10. Assess his/her communication style!
11. Collect serious problems which have affected this individual one way or another! Present how s/he has participated in solving the problem!
12. Look for events which exemplify how this person takes responsibility of his/her social environment! Commend these events!

The students outline the various elements of the key problem with the teacher's help: they define these elements based on the tasks they have completed (e.g. the relationship between skills and individual success; the role of the family in planning and living a successful life) which are related to the key problem and help understanding and solving the same.

The students report back on the results, the teacher manages the discussion.

The teacher and the learners summarise the possible answers according to the key problems.

The teacher together with the learners constructs the possible solutions to the problem (in writing, if necessary).

During the follow-up classes the detailed discussion concentrates on the preparation resulting in success (c.f. Dr. Raátz Judit and Dr. Szóke-Milinte Enikő. 2010. *Üzleti kommunikáció*. Budapest: Nemzeti Tankönyvkiadó.103-154).

1.3. Modelling strategy

From the second half of the 20th century, cognitive sciences have pursued the description of learning as modelling, and considered individual learning as a model-creating activity. In the constructivist learning theory paradigm, learning is an active process, an important momentum of which is interpretation, whereby the learning individual interprets new information with the help of his/her knowledge organised in cognitive systems. The learner's previous knowledge plays an important role in this process, which exists in the form of a so-called "naïve theories," worldviews, constructed theoretical systems or models in the learner's consciousness, since these are the elements that come into contact with the new information. Thinking and learning do not happen in a vacuum because elements of knowledge already at the child's disposal significantly influence, or even more direct, the cognitive processes. According to the constructivist learning approach, the learner does not simply incorporate new knowledge, s/he rather constructs it, which means that learning is a continuous formation of the internal world (Nahalka, 1997).

In line with the constructivist learning approach, the functioning of the human mind can be understood through modelling. Consequently, we construct our structures and models of the world, our environment according to our own rules, the role of which is to predict events in the world and the results of our actions, thus, we can control and regulate our own actions (Carey and Spelke, 1994; Nahalka, 2002).

The most important tenets of constructivism are as follows:

- The human mind constructs a model of reality, and evaluates and acts accordingly.
- The human brain operates with the help of apparatuses which process information organised according to various knowledge areas.
- A person has "theories" useful to evaluate his/her environment and control his/her actions.
- Development is nothing but the constant change, modification, extension and enrichment of constructions and worldviews operating in the brain, that is, a series of "conceptual changes" (our internal constructions change due to the processing of new information; continuous differentiation of the already existing principles; see Figure 2.) (Falus, 2003, 120-120).



Figure 2. The process of the development of knowledge

Therefore, we consider models such human-made theoretical systems that reflect the defining features of a given object or phenomenon of reality in a given place at a given time as a result of abstraction, generalisation, formalisation and schematisation following an individual process of learning. Supposedly, the psychological model and the examined reality are in an analogical relationship. From a teaching theoretical perspective, the constructive learning paradigm has resulted in the devising of the modelling strategy.

The first phase of the process of modelling is the devising of psychological or ideational models, that is, we try to map the subject of learning with its own structure and dynamics at an intellectual level through the already existing mental constructions. These ideational models are realised through internal talk and have a knowledge theoretical value. Ideational models are malleable and dynamic, while complex at the same time, and simultaneously comprise projected images, concepts, conclusions and relationships with regard to the subject of learning. They are not photocopies, identification between reality and the ideational model cannot be assumed.

In the next phase, we materialise the ideational models, which formally occurs through visual elements, symbols and signs (codes), that is, the materialised model attempts to represent the essential elements of the modelled object concurrently. This comprehensive, simultaneous and schematised model permits the learner to uncover the interrelationship between the studied elements at a deeper level, and in some cases allows for the testing of concrete actions on a model. The construction of these is made possible through abstraction, although they are not as complex and dynamic as the ideational models. Their advantage is that the structure and operation of the intellectual system becomes accessible, thus, the teacher can be informed about the child's possible deficiencies or the

process of thinking. They also allow us to carry out actions on them, or to clarify world models, and to create several model variations in order to arrive at a more precise analysis.

The third phase of modelling is the devising of verbalised models. They can be derived from the ideational models through exteriorisation, and they represent the highest level of abstraction. In case of verbalised models, the higher we move from the lower levels of abstractions, the more the essential value of the phenomena increases, words become the tools of thinking. The structure and generative rules of the languages reflexively influence thinking, and thus, the process of modelling (Ferenci and Fodor, 1996).

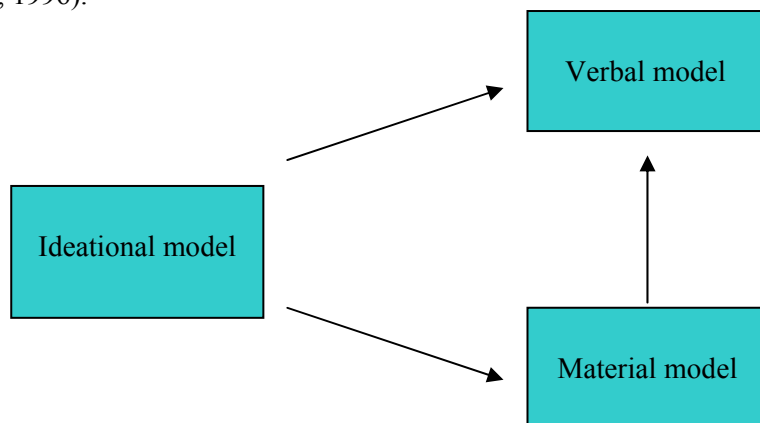


Figure 3. The process of modelling

Modelling strategy can follow two different paths (Figure 3.). During the process of learning we process the new, unknown information with the aid of the existing reality constructs, and devise new world model constructs. We shape both the processing of information and the process of creating a new world model as well as the actual new world model into a verbal model in order to make our processes of learning and their results available to others. Ideational models manifest in verbalised models, thus they ensure the accessibility of knowledge and the development of learning.

In case any problems arise during the process of learning, an intermediary step becomes necessary: that of the devising of materialised models. Materialised models can present several perspectives simultaneously, thus contributing to comprehension and the creation of a successful model. Once the materialised models have settled and crystallised, they are verbalised, while the process and result of learning are put into a linguistic form.

A good example of the application of modelling can be found on page 274 of *Üzleti kommunikáció* (Raátz and Szőke-Milinte, 2010):

Create a business in groups of five. Design the profile, image and main activities of the venture! Prepare a few advertisements where you present the services and products of the company!

Prepare for a meeting with another company of the same profile! Act out the meeting in a way whereby you previously prepare to use various tactics, organise the meeting and afterwards evaluate the same!

Conclusions

Having considered the examples it can be seen that both the problemsolving and the modelling teaching-learning strategy is very time-consuming, therefore, it is hardly possible to fully process a

given part of the curriculum during a class with these strategies. The operation and completion of the strategies require serious preparation and post-class activities, primarily from the teacher.

Although constructivist knowledge theory is considered the most up-to-date, this does not necessarily imply that previous practices of the empirical or problemsolving strategies should be seen as erroneous, or should be completely discarded. This would not be fair, as constructivist way of thinking cannot be identified with absolute certainty, either. At the same time, it is worth considering the characteristics of the curriculum, the students' age and other material conditions and circumstances when deciding on a particular teaching-learning strategy, as it is important to have some sort of strategy. The key to success is not the privilege of one strategy or the other, as we have to understand that the qualitative difference between a good and bad class in communication lies in the organisation and management of learning according to a teaching-learning strategy. This is due to the fact that teaching-learning without a strategy does not have a reproducible script, its stages are haphazard, therefore, it easily becomes boring or monotonous. In such cases the applied methods, tools and organisational structures are only loosely or not at all connected due to the lack of an organisational principle, and this does not benefit autonomous learning and discovery, either. Teaching-learning with a strategy has a clearly reproducible arc with appropriate steps, its stages follow each other according to the logic of learning and the applied methods and organisational structures are organically connected according to the nature of the learning theory, which facilitates autonomous learning, an easy discover and continuous motivation for the learner.

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