



# Educational Scaffolding in Primary Education from the Perspective of Younger-Aged School Pupils

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**Abstract:** Educational scaffolding as a form of dynamic, situation-based intervention by the teacher in the learning process of pupils creates an interesting area for exploring specific individually conditioned forms of support that can be captured in the interaction between teachers and pupils in the classroom. With regard to its content and importance, however, the broad conceptualisation of scaffolding as a strategy representing all possible forms and sources of facilitation of a pupil's learning calls the method into doubt. Specific features that would fulfil this strategy's original importance and the role it plays in the learning process, specifically in the zone of proximal development, are obscured by this broad conceptualisation. We attempt to gain a better understanding of the wider conceptual framework of scaffolding, which is generally defined as learning support, by way of recording strategies and procedures that are employed in practice and which pupils, teachers, and independent observers identify as supporting elements. The results of the empirical survey presented in this paper focus on a specific research question related to the perspective from which pupils in primary education themselves see learning support. Our aim was to ascertain how pupils of a younger school age subjectively respond to and describe the importance and sources of support used in the teaching process. In terms of methodology, we applied the phenomenological approach. Data was collected through in-depth, semi-structured interviews with 104 pupils of younger school age ranging from six to 11 years old. For data analysis, we used a qualitative structuring technique with the creation of inductive categories. A content analysis of the data made it possible to generate four key categories of learning support sources. The first, named "Absence of Fear", showed the importance of emotional support, in the form of the need for encouragement, praise, and chances to succeed, and, at the same time, the threat of the fear of failure, errors, or bad marks. The second category, named "Again and Again", viewed a specific social-historical feature of Czech school education in the form of routine repetition, revision, and practice of the curriculum. The importance of the social context of peer learning was coded in our data under the title "I'll Ask Denis". The significance of the illustrative nature of didactic aims in the form of pictures, drawings, maps, or stories, named by pupils, forms the core of the fourth and last category, called "Visualisation".

**Keywords:** scaffolding, learning support, zone of proximal development, emotional scaffolding, visual scaffolding



## INTRODUCTION

The identification and capturing of scaffolding strategies as tools of learning support for pupils belong among the problems that are frequently addressed in pedagogical research abroad (van de Pol, Volman, & Beishuizen, 2010). This construct has been neglected in the Czech professional environment so far; however, there have been some partial studies focusing, for example, on teaching interaction and communication, or on teaching in the form of dialogues, where the term *scaffolding* is mentioned (Šedřová, 2011). It appears more often in studies and didactic materials focusing on the teaching of foreign languages. It is used there as a tool in the development of language skills (Chocholatá, 2012). We can also mention research focused on the use of scaffolding strategies in teaching materials (Sikorová, 2016; Sikorová & Červenková, 2016).

The construct of *scaffolding* is not clearly conceptualised and is even called into question by some authors, especially for its rather metaphorical significance or overly broad specification in terms of content (Stone, 1998). Puntambekar and Hübscher (2005) state that the terms *scaffolding* and *support* are increasingly often being used as synonyms, which creates problems as it does not enable a deep understanding of the potential of scaffolding as a specific tool to foster pupils' learning.

We attempt to gain a better understanding of the wider conceptual framework of scaffolding, which is generally defined as *learning support*, by way of

recording the strategies and procedures employed in practice that pupils, teachers, and independent observers identify as supporting elements. The subjectively and objectively reflected forms of support for pupils' learning will subsequently make it possible to describe and explain the specific features of scaffolding as one of many educational strategies.

The results of the empirical survey presented in this paper focus on a specific research question related to the perspective from which pupils in primary education themselves see such learning support. Our aim was to ascertain *how pupils of younger school age subjectively respond to and describe the importance and sources of support used in the teaching process*.

## THEORETICAL BACKGROUND

We consider it important to base our theoretical starting point for the concept of scaffolding on the original studies and theses of Vygotsky and Bruner, as these have been essentially devalued by the repeated interpretations made by other authors of academic articles and by other researchers through a broadening of the characteristic traits and essence of the original conceptualisation and operationalisation of scaffolding, a broadening that has led more to obfuscation than to the clear comprehension of scaffolding as a specific phenomenon in the learning process (Stone, 1998; Pea, 2004; van de Pol et al., 2010).

The application of the *scaffolding* metaphor is ascribed to Jerome Bruner and



his colleagues David Wood and Gail Ross (Wood et al., 1976). In their article, they described the results of research focusing on a systematic description of how children react to various forms of supporting elements that are offered to them as useful when dealing with various tasks. Bruner, inspired by Lev Vygotsky, set the tasks in his experiment to be such that the children were not able to handle them at that time. However, when the children received some help, the solution of the tasks made it possible to develop a higher level of cognitive skills located in the *zone of proximal development* (hereinafter referred to as ZPD).

Bruner made use of two key premises of Vygotsky's theory of the sociocultural conditionality of cognitive development and of the precondition that the child's learning cannot be carried out without the aid of external stimulation, social interaction, and communication (Vygotskij, 1976a, b). Thus, the current support provided by the teacher and used by the pupil in order to solve the tasks plays a certain initiation role, allowing the activation of the latent capacity of the pupil in the form of his or her cognitive development potential located in the ZPD.

### **Typical features and functions of scaffolding**

The pupil's latent capacity in the environment of the ZPD is as individually preconditioned as are the scaffolding tools that may help the pupil to activate this capacity. Therefore, it is not easy to capture

a universal mechanism or system of scaffolding tools suitable for, and universally applicable to, all pupils.

As regards *scaffolding*, this concerns specific, individually and situationally conditioned help provided by the teacher to pupils, who, during the teaching interaction and communication with the teacher, actively participate in the realisation of the learning activities and solving of tasks, within which the pupils are fully-fledged participants in their own learning and the teacher acts as a situational diagnostician of each pupil's individual learning needs.

During their experiment, Wood, Bruner, and Ross (1976, p. 206) named the six principal functions of scaffolding: (a) To gain, strengthen and maintain the pupil's motivation when dealing with a task; (b) to minimise those parts or stages of the task that the pupil cannot solve without help; (c) to maintain the pupil's efforts to complete the task; (d) to discuss the critical moments of the task with the pupil; (e) to eliminate the pupil's anxiety and stress; (f) to discuss the anticipated result of the task with the pupil and explicitly formulate the criteria for the task solution.

If the pupil does not use the supporting tool that is offered, that does not necessarily mean that the tool is not scaffolding-based. The ability to make use of supporting tools to solve a task is associated with the ZPD, i.e. it is specifically and individually preconditioned and, in addition, it is based on the current cognitive level of the pupil. An important role



is played by what are called *dynamic diagnostics*, which allows the teacher or experimenter to view the ZPD and decide, during the solution of the interactive task, on the demands of the task as well as on the scaffolding tools allowing the pupil to solve the task.

The need for specific, situation-based help related to the individually preconditioned process of the pupil's learning makes some authors cast doubt upon the broad conceptualisation of scaffolding, which might be used as a universal teaching and learning strategy. We would have to be able to predict the course of the pupil's learning, including all the difficulties occurring in that process, which is not very likely. What we can anticipate, however, is the teacher's ability to diagnose the pupil's difficulties during the learning process and provide the pupil with a suitable form of support or help.

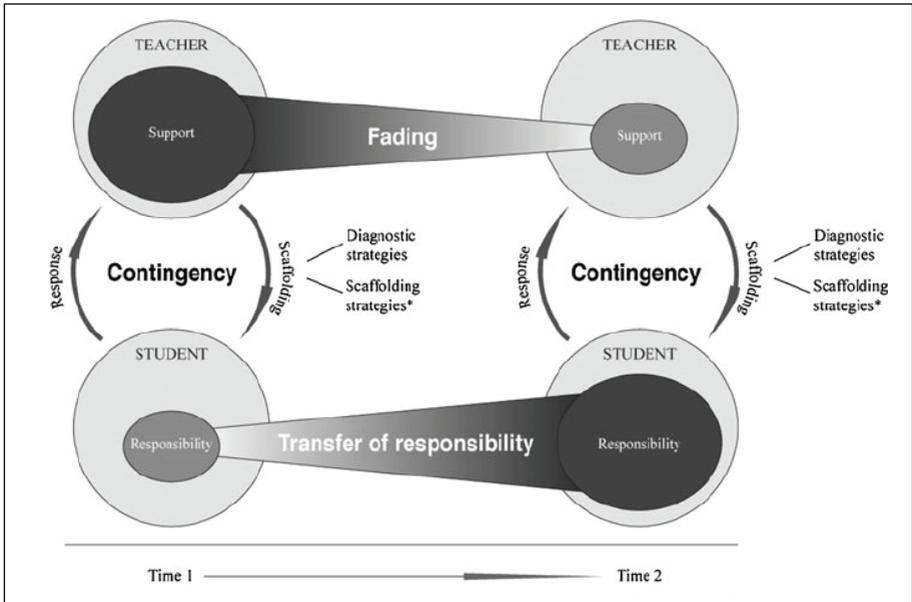
The *contingency* principle is perceived by experts as an identifying symbol or condition that must occur to make it possible to set up a scaffolding strategy. In terms of significance, the *contingency* construct is associated with a certain sensitivity of the teacher to the pupil's learning difficulties or to obstacles that unpredictably occur when dealing with the learning task (van de Pol et al., 2010, 2015). Van de Pol et al. (2015, p. 619) explicitly write, in the case of scaffolding, about what they call *contingent support*.

In that context, the concepts of what are called *hard* and *soft* scaffolding have been discussed and several experts have cast doubt on them (Saye & Brush, 2002).

Hard scaffolding, as what is called a static form of support, is, in the view of Saye & Brush (2002), predictable. It flows from the experience of the teacher, from the difficulties that have already arisen for pupils when solving similar tasks. Soft scaffolding, as a dynamic form of support, corresponds to the characteristic trait of contingency. It is associated with the situationally conditioned, present-moment learning need of the pupil. Hard scaffolding, however, essentially denies the contingency principle as a conditional trait of scaffolding.

In Figure 1 below, we can see the position of the scaffolding strategy in the broader conceptual framework as a part of a process, during which (i) *the interactive reactivity of the teacher to the pupil's learning difficulties, which are hard to predict*; (ii) *the identification and diagnostics of those difficulties by the teacher*, and (iii) *the choice of a scaffolding strategy* occur (Pea, 2004; van de Pol et al., 2010, p. 274).

By indicating the individual learning stages, which include the incorporation of a scaffolding strategy as a tool for the development of higher skills, we reach another typical feature that makes scaffolding different from other tools used for support, namely its time limitation, the fact that it is only temporary. What is called the *fading* principle can also be called *weakening* or *dying away*, and it occurs when the pupil is able to solve the task on his/her own and shows the necessary level of internalisation of higher levels of skills, and thus the support provided to the pupil can be withdrawn. However,



**Figure 1** Conceptual model of the scaffolding process (van de Pol et al., 2010, p. 274)

the pupil can continue using, e.g., the algorithm of helpful steps provided by the teacher within scaffolding. Such an algorithm then becomes the pupil’s *internal language* (Vygotskij, 1978a, b), and the pupil continues using it in order to solve the tasks, but does so independently and thus assumes *responsibility for his/her own learning*. *Weakening of support* and the assumption of *responsibility for the pupil’s own learning* are usually considered the last stage of the learning process (iv), in which scaffolding plays a central role.

We believe that understanding scaffolding as a part of the learning process, and not only as a one-time phenomenon, is an initial precondition for the deeper

understanding and empirical capturing of it.

## METHODOLOGY

Methodologically, we used a *phenomenological approach* to analyse the data. Because of its qualitative, inductive character, this approach enables us to capture evidence of reality and its subjective interpretation from the perspective of the participants themselves. We attempted to capture the phenomenon of *learning support* both as it *appears* and as it is *understood* in immediate contact and in natural contexts from its foundations and without the subjective burden of the researcher.

**Table 1** Characteristics of the research file of pupils of younger school age

<b>Pupils of a younger school age</b>	<b>Girls</b>	<b>Boys</b>
1. primary school year	10	6
2. primary school year	11	7
3. primary school year	13	17
4. primary school year	11	9
5. primary school year	8	12
<b>Total</b>	<b>53</b>	<b>51</b>

Data was collected through *in-depth, semi-structured interviews* with 104 pupils of younger school age ranging from six to 11 years old. The structure of the research sample in terms of the primary education years and gender is indicated in Table 1. The interviews were held between September 2017 and May 2019.

*Semi-structured individual interviews with pupils* from selected classes of the primary school were conducted using the following basic questions:

Who or what helps you learn?

Who or what helps you to complete tasks in lessons? In homework?

What help do you need from your teacher at school?

What concrete things does the teacher do? How does the teacher help you at school?

What help do you need from your teacher directly during lessons? In the individual subjects (Maths, Czech, Natural Science, National History)?

What concrete things does the teacher do, e.g., in maths lessons? How does the teacher help you in maths lessons?

For the purposes of the content-based data analysis we used the qualitative *struc-*

*turing* technique with the creation of *inductive categories* by Mayring (2000). For the individual parts of the analysed data obtained through the interviews, we created *categories* in an inductive manner on the basis of the content similarity at three levels of structuring. In the first stage, called *formal structuring*, we used the formal *thematic* point of view in order to analyse the internal structure of the material. This was followed by the second stage, *content structuring*, where the defined content of the material was determined and marked through theoretically prepared *principal categories*, and in the third stage of the analysis we carried out *standardising structuring*, during which we created “types” as titles of every category, which we completed with authentic statements of the respondents.

The arrangement of the individual categories when being interpreted does not correspond to their level of content saturation. We did not intend to evaluate the frequency of the statements in the individual categories; we wanted to capture all the available nuances associated with *learning support* by the participants in the school environment, i.e. primary education pupils.



## RESULTS

During the data collection in the form of interviews with pupils we noticed an interesting fact. The first reaction to the questions regarding the support and help that the pupils reflected on in the context of learning itself was generally unsure, and the most frequent answer was *“I don’t know.”* A basically essential, initial, and, at first sight, simple question regarding the pupils’ daily experience turned out to be difficult for them to answer. We were aware of the risk associated with a generally formulated question, but we were led by our efforts to capture the learning support phenomenon in the significance attributed to it by the participants themselves on the basis of their subjectively reflected experience. Finally, we managed to capture such experience, and the result of the analysis consists of the four basic categories specified below, which make it possible to view the individual experience and statements of the pupils.

### **“Absence of Fear” – trust, ease, safety...**

*“It would help me if we didn’t get any marks. I wish I weren’t nervous about getting a bad mark.”* The pupils especially named, as an example of emotional tension, their fear of admitting a mistake, of making a mistake, and the related fear of receiving a bad mark.

A key stage of the scaffolding process is identifying and diagnosing the pupil’s difficulties, leading to a decision as regards the choice of a supporting scaffolding strategy (van de Pol et al., 2010). If we consider supporting the pupil’s learning, we consider individual, situation-based help that the teacher is only able to give at the moment when the mistakes that are identified occur during the procedure of solving the learning tasks. This is a key precondition of learning which cannot be avoided if we respect the pupil’s learning premises as set forth by Vygotskij (1978a, b). In their experiments, Vygotsky, as well as Bruner, generally used as a basis the mistakes the pupil made when dealing

**Table 2** Structure of learning support categories as viewed by pupils of younger school age

<p><b>“Absence of Fear” – trust, ease, safety...</b>  <i>“I wish I weren’t nervous about getting a bad mark...”</i></p>
<p><b>“Again and Again” – a learning strategy that helps me...</b>  <i>“Revise more and practise at home.”</i></p>
<p><b>“I’ll Ask Denis” - communication, cooperation, sharing...</b>  <i>“When I am a member of a team, it helps me, and a friend sometimes explains it better to me than the teacher...”</i></p>
<p><b>“Visualisation” – mnemonic devices and multi-sensory learning...</b>  <i>“I found multiplication very difficult, so you helped me using those pieces of wood. I could see it physically...”</i></p>



with the learning tasks, with the aim of specifying the ZPD exactly and choosing which scaffolding supporting tools could be used effectively.

Wood, Bruner, and Ross (1976) determined that the *elimination of pupils' anxiety and stress is a key function of scaffolding*. What has been called *emotional scaffolding* (Yelland & Masters, 2007; Badošek, 2016) relates to one of its key functions, namely, efforts to support and maintain the pupil's motivation and activation when overcoming the difficulties faced when dealing with learning tasks. Basically, these are the situations that the pupils in our research file commented on as follows: "When the teacher is shouting that we are doing something wrong" or "I don't like it when the teacher is rushing the curriculum" and are counter-productive. As regards the support and help that the teacher provides to the pupil, let us consider it the basis of the trust, openness, and security that is then reflected by the pupils of younger school age in our research sample. The emphasis on performance in connection with established evaluation criteria, however, forms a specific socio-cultural feature of Czech education, and this aspect must be monitored more deeply, as it creates a social-historical context of pupils' learning, forming the premise of the theory by Vygotsky.

### **"Again and Again" – a learning strategy that helps me...**

*"It would be helpful if I could practise it every day... revise more and practise*

*at home... I'll keep trying..."*. The specific strategies used by the pupils in our research sample do not form a strongly saturated category in terms of frequency. The answers concentrated in this category were not colourful, or interesting, or new for us. However, they might form a specific socio-historical feature accompanying the reality of Czech school education in the long term. Here the principle of repetition is concerned, as well as the need to continuously revise and practise newly-gained knowledge and skills: "When I am not good at something, I need to practise it...".

The theory of the culturally preconditioned development of higher mental functions assumes that the child, during his/her development, further internalises and uses the forms and models of behaviour that others have used before when interacting with the child. "Every mental function appears twice on the stage during the child's cultural development, and at two levels – first at the social one, then at the psychological one, first among people as an inter-psychical category, then in the child's heart as an intra-psychical category." (Vygotskij, 1976a, p. 121).

The question is, however, whether the form of a certain routine revision and practising of the new curriculum is connected to the teaching strategy mediated to pupils by teachers, or whether it forms a specific learning strategy preferred by pupils for whom the process of acquiring new skills and knowledge is still beyond their latent capacity. In such an event, however, those pupils would not be able to



solve the learning tasks even if they were provided with external help. According to Bruner, the experiential basis for dealing with tasks with higher operating demands forms the *current level* of the cognitive functions and the system of acquired knowledge and skills already internalised. Without that basis, pupils choosing a supporting strategy do not prefer “*blind imitation*” of the model solution of a new task as demonstrated by the teacher (Wood et al., 1976, p. 99).

Understanding the significance of routine revision and practice in the learning process of pupils of younger school age is made rather complicated by the traditional, basically rigid approach in the form of frontal teaching, within which learning activities are designed in the same manner for all pupils regardless of their individual learning needs, i.e., regardless of their current condition and, in particular, regardless of the latent capacity of the cognitive development of every single pupil.

### **“I’ll Ask Denis” – communication, cooperation, sharing...**

*“When I don’t know what to do next, I ask Denis, and then I understand it... A friend sometimes explains it to me better than the teacher... Friends can explain it better and it is more fun than the teacher’s explanation...”*

Vygotsky’s initial proposition that the development of an individual cannot be isolated from the individual’s social and cultural context (Vygotskij, 1976b) clearly refers to the relationship framework of

a pupil’s school education, and it might be anticipated that the social context of learning somehow demonstrates itself in pupils’ subjective interpretations. This was a rich category in our data set. What took us by surprise, however, was its embodiment in the dimension of mutual, partner learning.

Neither Vygotsky nor Bruner talks about the key role of an *adult* in the pupil’s learning process; they talk about the role of a *more experienced* or a *more knowledgeable* partner. The pupils in our research set only mentioned the role of a friend or a schoolmate who can mediate understanding to them. The teacher’s role demonstrated itself as rather belonging to the area of the elimination of fear and the creation of a supportive, safe environment. Research conducted by Collins (2006) and Falkegaard Slot (2015) also indicates the irreplaceable significance of what is called *social scaffolding* in the context of using collaboration among pupils and cooperative instruction.

### **“Visualisation” – mnemonic devices and multi-sensory learning...**

*“When the teacher shows it to me on the board ... When I count it using my fingers ... When I had problems with multiplication, you helped me with those pieces of wood and I could see it physically ...”*

The core of the fourth and last category consists of a principle that proved to be essential in the statements made by the primary school pupils in our set: the



*illustrative nature* principle. The pupils mentioned particular examples of didactic material in the form of pictures, drawings, tables, charts, or maps. The *illustrative nature* principle was always mentioned in this context, as it helps pupils overcome their learning difficulties.

Alibali (2006) includes *visual scaffolds* among the basic types of supporting strategies used in addition to concept maps and mental maps, variable kinds of clues in the form of hints, examples, tips, stories, or additional explanations. The list also includes *mnemonic devices*, which were also mentioned by the respondents in our research sample. Let us give an example.

In the maths lessons of the third year of primary school, pupils were developing their knowledge of the number 2 in the multiplication table. The teacher anticipated various levels of acquiring that knowledge and offered pupils an aid in the form of Table 4 below. The pupils could use the table when dealing with arithmetical problems. It turned out that pupils who had already acquired the knowledge did not use the table at all during the lessons, while, on the contrary, some pupils used it all the time. This example is seemingly trivial. However, it shows the above-mentioned principle of an *illustrative nature with a mnemonic potential*, and, in addition, we can capture here a stage of the scaffolding process called *fading*, which is quite hard to identify. It is explained here as the gradual withdrawal of the supporting tool that is provided once the pupil does not need it any longer, as he/she has

already internalised the acquired knowledge/skill, which had been part of the ZPD until that time and thus the pupil had not been able to use it without external help (Vygotskij, 1976a, b).

<b>X 2</b>	
1	2
2	4
3	6
4	8
5	10
6	12
7	14
8	16
9	18
10	20

**Figure 2** Illustrative mnemonic device for acquiring knowledge of the multiplication table

It is difficult or sometimes even impossible to identify a piece of didactic material as a scaffolding material without direct monitoring of the lessons in which it is used, without capturing the process of dealing with learning tasks and the forms of interaction between the teacher and the pupil. This problem is also connected with the identification of scaffolding strategies in textbooks or in other textual sources if



we were to analyse them ad hoc without capturing an actual teaching context.

We believe certain types of aids may fulfil demands for scaffolding aids that are otherwise hard to capture. The above-mentioned example of an aid may be marked as a scaffolding tool for two reasons. Primarily, it is intended as an aid for the acquiring of new knowledge and skills or, if the pupil has any learning difficulties, as an aid helping the pupil to solve a learning task on his/her own – the first stage of scaffolding. The pupil uses the aid as long as he/she needs it, until the last stage of scaffolding, which is called *fading*.

## CONCLUSIONS AND DISCUSSION

Our objective was to examine pupils' learning support possibilities from the perspective of the pupils' actual experience, and to interpret the identified sources of support in the context of the principles of scaffolding as a specific concept, realistically reflecting the principles of sociocultural, constructive theories of learning and teaching.

Content analysis of the data made it possible to generate four key categories of learning support sources. The first, named "Absence of Fear", showed the importance of emotional support in the form of the need for encouragement, praise, and chances to succeed, and, at the same time, the threat of the fear of failure, errors, or bad marks.

The significance of *emotional scaffolding* as a specific form of learning support is frequently mentioned in special-

ised resources (Jumaat & Tasir, 2014). The elimination of pupils' anxiety and stress is one of the principal functions of the scaffolding strategies (Wood et al., 1976; Pressley, Harris, & Marks, 1992). It is mentioned as an initial premise of the pupil's effective learning, without which the process cannot be diagnosed, facilitated, or controlled. As viewed by the pupils in our research sample, the support of learning especially consists of the absence of fear or anxiety and concern about mistakes or failure. In Bruner's words, "*Dealing with problems with a teacher should be less dangerous or stressful than without one.*" (Wood et al., 1976, p. 98).

The second category, named "Again and Again", the title of which was derived from the authentic statement of a pupil, contains individually framed procedures that the pupils reflected on as supporting and helpful. The content of the category is not saturated in terms of frequency or variability as regards the procedures used, but points out specific sociocultural and probably also social-historical features of Czech school education. Here we are discussing generalised strategies associated with the need for continuous *revision* and *practising* of the curriculum.

What remains unanswered is the question of whether or not we have come across the traditional, transmissive conception of teaching here, versus a constructivist one, in our efforts to gain a better understanding of the significance of this category: passive memorising and routine practis-



ing of a single model solution versus active learning, searching for problems and procedures to solve them, evaluating and asking questions. These are two different paradigms representing completely different explanations of the gist and nature of human learning and its conditions. Is it at all possible to capture and identify scaffolding strategies based on the social-constructivist approach within traditionally transmissive-designed teaching? We would like to find the answers to those questions in follow-up research.

The importance of the social context of peer learning was coded in our data under the title "I'll Ask Denis". Pupils responded spontaneously to positive experiences with paired or cooperative learning and the possibilities of having their work explained by their classmates. Vygotsky's theory is based on the concept of learning as a culturally and socially mediated activity that is initiated interactively through external help and stimulation (1976a, b). This initial proposition proved to be true in our research. The research by Collins (2006) and Falkesgaard Slot (2015) also emphasises its anchoring exactly in the form of support and help provided by schoolmates and friends.

The *illustrative nature* principle with *mnemonic* potential created the core of the fourth and last category. This is a very saturated category with potential for further research, as it points out the significance of *visualisation* in the process of pupils' learning and the role that visualisation plays in didactic aids and materials. *Visual scaffolds* play an essential

role in scaffolding aid typologies. Alibali (2006) includes in these, for example, charts and graphs as aids with visual information, stories, pictures, maps, or schemes.

## SUMMARY

The theoretical analysis specified above implies that it is necessary to define *scaffolding* as a stage of the learning process including the following: *a sensitive reaction of the teacher to the pupil's learning difficulties – diagnostics and evaluation of the difficulties or obstacles when dealing with a learning task – the choice and use of supporting scaffolding strategies – internalisation of the acquired skills associated with a gradual weakening of support and thus the pupil's assuming responsibility for his/her learning* (van de Pol et al., 2010).

*Scaffolding* concerns dynamic intervention that is attuned to the individually preconditioned learning progress of every single pupil, which is, in addition, influenced by a number of situation-based factors. The choice and use of a scaffolding strategy is strongly preconditioned by that individuality; therefore, it cannot be applied in the same way in different teaching situations or considered a universal supporting teaching strategy (van de Pol et al., 2010). The conceptualisation and operationalisation of the scaffolding construct must be based on the original paradigmatic bases of the sociocultural conditionality of learning as determined



by Vygotskij (1976a, b) and then developed by Bruner (Wood et al., 1976) or Galperin (1969).

Our aim was to look at forms and sources of learning support from the perspective of pupils' actual experience and to try to interpret them in the context of the principles and functions of scaffolding as described in social-cognitive theories of learning and teaching. The sources and forms of learning support that were captured made it possible to identify theoretically anchored types of scaffolding strategies in the *emotional*, *social*, and *visual* dimensions. However, we did not penetrate more deeply into

the possibility of diagnosing the *pupil's zone of proximal development*, which plays the central role in the choice and use of the scaffolding supporting tools. It is only in this context that it is possible to clearly identify the specific features of scaffolding correctly as one form of support for pupils' learning. We believe that it is very difficult to identify the forms and resources of learning as "scaffolding" ones without direct monitoring of teaching and without capturing the process of the solving of learning tasks by the pupils in interaction with the teacher, a mentor, or a more experienced schoolmate.

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## SEBEROVÁ, A., GÖBELOVÁ, T., ŠIMIK, O., SIKOROVÁ, Z. Výukový scaffolding v primárním vzdělávání optikou žáků mladšího školního věku

*Výukový scaffolding jako forma dynamické, situačně podmíněné intervence učitele do procesu žákovy učení vytváří zajímavý terén pro zkoumání specifických, individuálně podmíněných forem podpory, které je možné při interakci učitele a žáka ve výuce zachytit. Svým obsahem a významem široká konceptualizace scaffoldingu jako strategie reprezentující všechny možné formy a zdroje facilitace žákovy učení však vede k jeho zpochybnování. Dochází k zastírání specifických znaků, jež by naplnily jeho původní význam a úlohu, kterou sebrává v procesu učení, konkrétně v zóně nejbližšího vývoje. Naši snahou je lépe porozumět významově širšímu kontextuálnímu rámci scaffoldingu, kterým je právě obecněji definovaná podpora učení, a to prostřednictvím zachycení v praxi využívaných strategií a postupů, které jako podpůrné identifikují žáci, učitelé a nezávislí pozorovatelé. Výsledky empirického šetření prezentované v tomto příspěvku jsou zaměřeny na specifickou výzkumnou otázku vztahující se k optice, kterou nablíží na podporu učení samotní žáci primárního vzdělávání. Naším záměrem bylo zjistit, jak žáci mladšího školního věku subjektivně reflektují a popisují význam a zdroje podpory, které využívají v procesu učení. Metodologicky jsme vycházeli z fenomenologického přístupu. Ke sběru dat jsme využili hloubkové polostrukturované rozhovory se 104 žáky mladšího školního věku v rozmezí 6–11 let. K analýze*



dat jsme využili kvalitativní techniku strukturace s tvorbou induktivních kategorií. Obsahová analýza dat umožnila generovat čtyři klíčové kategorie zdrojů podpory učení. První, kódovaná jako „Absence strachu“, ukázala význam emoční podpory v podobě potřeby povzbuzení, pochvaly a šancí na úspěch a současně hrozby strachu z neúspěchu, chyby či známky. Druhá kategorie „Znovu a znovu“ nahlédla specifický, sociohistorický rys českého školního vzdělávání v podobě rutinního opakování a procvičování osvojovaného učiva. Význam sociálního kontextu partnerského učení byl v našich datech kódován výrokem „Zeptám se Denise“. Žáky pojmenovaný význam názornosti u didaktických pomůcek v podobě nákresů, obrázků, map nebo příběhů tvoří jádro poslední, čtvrté kategorie s názvem „Vizualizace“.

**Klíčová slova:** scaffolding, podpora učení, zóna nejbližšího vývoje, emocionální scaffolding, vizuální scaffolding