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15 Adaptive schooling, effective learning organisation, and translanguaging

In recent decades, *learning* has replaced *teaching* as a key concept of education and schooling, re-centering our attention on learners' rather than only teachers' activities in classrooms. Our understanding of learning has changed significantly as a result of insights from cognitive science in various disciplines (Baars 1986; Royer 2005; Pléh, Gurova, and Ropolyi 2013; Evans 2019), on the one hand, and the spread of alternative pedagogies, on the other. The redefinition of learning affects the entire organisation of knowledge development, including the ways teachers plan and deliver classes; hence, the events in a translanguaging classroom are also shaped by the shifts in our understanding of learning. Taking the insights gained in Chapter 13 on culturally transformative, community-based education further, this chapter argues that it is worthwhile to centre the concept of school on learning, rather than teaching, and to integrate the culture of learning-centred schools into a broader system of education, in which the concept of learning is intertwined with ideas about the role of the teacher and the overall function and purpose of school. A model for organising learning and teaching in line with this new thinking is the adaptive-inclusive school, whose idea was developed by Hungarian education scholars (e.g. Rapos et al. 2011; Gaskó et al. 2011). In this chapter we argue that the practice of translanguaging can be thought of as a central part of the adaptive-inclusive model.

Changes in the theory of education in recent decades have brought effective learning to the centre of education research. Didactics thus focuses on learning (Ollé 2003; Falus 2007), and this effective learning process is facilitated by teaching, which, as a result, started to be seen as "learning management" (Földes 2009), "learning organisation", and "the facilitation of learning", and includes the choice of methods and classroom activities, the arrangement of learning materials, and the organisation of the temporal and spatial framework of learning. Placing learning at the centre of discourse on education has been instrumental in rethinking pedagogical and psychological theories of learning. Innovative ideas have been put forward to describe the process of learning and the emerging new approaches have developed further ramifications.

Jörg, Davis, and Nickmans (2007) argue that in formulating new theories of learning, education must take into account the complex realities of learners' background. In the Hungarian context, Nahalka (2009: 37) identifies four key factors in the transformation of our understanding of learning: 1. The discovery of the world

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https://doi.org/10.1515/9783110769609-015

which surrounds the school is best facilitated through authentic activities and active engagement with lifelike experience and events, instead of activities such as "learning by heart". Learners' pre-existing experience should, therefore, be brought into the school context, including the language practices of their home. 2. Constructivist learning theories (Glasersfeld 1995), have underlined that the process of learning cannot be seen as a passive reception of content from outside (i.e. an inductive process). It is important to map, and relate to, students' prior knowledge, cognitive structures, and linguistic behaviour. 3. An appreciation of local cultures transforms teachers' perception of learners (cf. Chapter 13.3). Individuals are taught, as a result, in a way which adapts to their individual needs and, as in the case of Roma learners, language practices (cf. Brown, Metz, and Campione 1996). 4. Hence, the discovery and development of competences is the main focus of learning. This motivates learners' interactions and creates opportunities for learners' active contribution and agency. These theoretical principles are now making an impact on teacher training in Central Europe, on teachers' attitudes, and, as a result, on school-based practices. Therefore, the new concept of learning is also reflected in learning organisation.

Learning organisation is a complex term which can be understood in the sense of "classroom management" or, as in this chapter, more broadly and comprehensively. Classroom management is a variety of skills and techniques which teachers use to ensure that students are kept focused, organised, and academically productive during class, and that lessons run smoothly, without students' potentially disruptive behaviour undermining the delivery of instruction (Brophy 1983; Szivák 2007). Learning organisation, in this narrow sense, refers primarily to the creation and maintenance of behavioural frameworks for learning. This chapter understands learning organisation as the organisation and facilitation of the learning process as a whole, including the choice of classroom activities and method of learning, as well as the management of problems arising in the classroom.

Pedagogical principles which are seen as effective today partially overlap with notions previously defined as teaching methods (e.g., co-operative methods v. co-operative learning organisation), but they also incorporate innovations and good practices emerging in educational theory research, such as project-based learning, tiered and differentiated instruction, and drama pedagogy (cf. for example Woolfolk Hoy and Weinstein 2006; McCaslin et al. 2006; Hickey and Schafer 2006). Teachers who organise learning effectively apply differentiation when taking into account learners' individual strengths, weaknesses, learning styles, etc. This is imperative in a school where pupils' language practices differ significantly from the language of instruction and/or from the teachers' language practices. As a result of effective learning organisation, teachers can afford to be flexible about subject content and teaching time and place. They are able to pay attention to the development of social skills, to use methods which motivate learners, to encourage diversity in students'

thinking, problem-solving and communication. Learning and the learners are placed front and centre in the teacher's work, which involves planning and organising in advance the conditions and resources needed for each individual child's learning in the classroom. Much of the teacher's work is, therefore, preparatory, and her work in the classroom involves mostly monitoring and supporting individual learning. In this framework, developmental activities are part of the classroom and occur while the pupils work actively on tasks. This new understanding of the teacher's role shifts the focus from teaching, lecturing, and knowledge transfer to facilitating, planning, and organising. The following subsections examine ways in which translanguaging can be linked to effective learning organisation.

The next two sub-chapters present four videos which show the potential of translanguaging in different classroom situations and at different stages of the class's progression in connection with effective learning-management practices. The translanguaging classroom situations presented in the videos are the outcome of both the teacher's initiatives to help pupils learn more effectively and learners' spontaneous language behaviour rendering learning more effective (cf. Chapter 10). A co-operative learning approach is beneficial for several reasons: it allows learners to have a social learning experience and to develop an individual learning path, leading to autonomy in learning. Furthermore, it also promotes spontaneous translanguaging moments. In videos 5 (*Translanguaging in Maths class*), 12 (*Translanguaging corriente*), and 14 (*Translation tasks in translanguaging*), we can see examples of the way in which pupils, who are already skilled in collaborative work, use translanguaging in a group task with the teacher acting as facilitator to achieve learning goals. The analysis of video 31 (*Multimodal experience in knowledge building*) shows that it is possible to reshuffle the hierarchies in the teacher-student relationship, and to apply a translanguaging approach even in frontal learning organisation. The video shows a science lesson where the teacher found common ground between the possibilities of multimodality and the use of translanguaging. The chapter argues that a translanguaging pedagogical stance has a place in a general school concept, which is summarised under the term *adaptive school* and described in the final sub-section of this chapter.

15.1 Varied learning organisation in the translanguaging classroom

In the classroom activities under discussion, principles of cooperative learning organisation are applied. Collaborative learning interactions support peer learning and provide spontaneous opportunities for translanguaging. The structure of

tasks can encourage learners to work together if all learners are required to contribute to the solution. Learners are motivated to share responsibility for the solution of the task if the teacher manages to fine-tune two main factors: on the one hand, the difficulty level of the task, which implies the need for joint effort and collaboration, and, on the other hand, the limited time available to complete the task. This makes cooperation between pupils inevitable: they divide the tasks between themselves, support each other, and work together. A successful task engages the learners' interest: it challenges them and makes them think; it might also have several solutions, it is a source of success for all learners, and requires a wide range of skills, abilities, and behaviours on the part of learners (Gillies and Ashman 2003; Gillies 2007, 2016; Orbán 2011). Cooperative learning involves learners communicating with each other, often in a spontaneous way. Furthermore, the videos illustrate that the preparation for, and checking of solutions in, a group task provides an opportunity for teacher-initiated translanguaging.

In video 5 (*Translanguaging in a Maths class*), we can see details of a third-grade maths lesson (cf. Chapter 11). The pupils practise basic mathematical operations in groups, using a multi-step task requiring abstract thinking. According to the description of the task, pupils have to find out what presents (which four birthday cards) a little mouse was given for its birthday. Each group is given twelve cards and a sheet of paper with a long list of numbers written on it. Each card has a mathematical operation on it, which pupils have to complete. After having completed the twelve operations, each group has to find out which four of the twelve results they attained can be found in the long list of numbers on the separate sheet of paper. The little mouse gets as a present the four cards whose results appear on the separate sheet. This task is complex, including a sequence of activities which are challenging for the pupils in the lower grades of primary school. A succession of different steps leads to the final part of the task, the selection of the gift cards. Here, the time allotted to the task and the fast pace of making the calculations prompted the children to work together. Those groups that worked well together realised that dividing the task between group members would lead to a better result. Working in groups in the lower grades of primary school is a difficult task and the social skills needed are often still lacking. In maths lessons, it is particularly difficult for several pupils to work together because everyone has their own logical structures for solving a problem. Nevertheless, group work is useful in a lower-grade mathematics class, of which the recorded classroom is a good example. Translanguaging, adopted in the translation of the complex description of the task, contributed to making group work an effective approach to learning organisation.

At the beginning of the classroom recording (video 5: 0.40–1.35) we can see that the groups have already been set up and the task is being given out. The first

step to successful task completion is to understand what exactly needs to be done. In fact, for complex tasks that require group work, a clear understanding of the task is a key component of effectiveness. Furthermore, it is essential that in the motivated, emotionally engaged, work-intensive periods of the hustle and bustle of group work, all learners should focus their attention on the teacher's instructions and comprehend all the information needed to solve the task accurately. The teacher in this scene explains the task in Hungarian. It is clear from the video that most pupils are not paying attention: they are drawing on the desks, looking at their notebooks, exchanging words in low voices, or staring in a disengaged manner. According to the teacher (video 5: 2.29–3.03), this response is quite common because group members are often unable to understand fully the instructions in Hungarian and lose the thread. So, group work is helpful and motivating but much depends on task preparation and introduction. It gives pupils more responsibility and autonomy but its success is not to be taken for granted.

It is likely that children whose Romani skills are better than their Hungarian have greater difficulty in understanding this complex task and executing the operations correctly if the task is presented to them in Hungarian. When setting group tasks, Orbán (2011) also draws attention to the importance of checking accuracy and comprehension. Task delivery is complex in such cases, and a quiet, relaxed atmosphere for group work can only be ensured if the instructions clarify all the important points beforehand. The task should be clear to everyone, the objectives and the desired steps to reach them should be clearly explained, and, what is more important, understood. The components of effective cooperation should be reiterated several times, clear time frames should be set, and evaluation criteria and methods should also be explained in advance. This will help to avoid further questions and uncertainties, as will feedback from learners on whether they have understood the task. Feedback can be given simply by nodding, or repeating and summarising parts of the instruction. Translanguaging is introduced at this point in the lesson: Zita asks one of the pupils to summarise the task instructions in Romani. Shortly after the pupil starts to speak, the others suddenly start to listen (video 5: 1.39–2.28): they signal to each other to be quiet and focus on the student who is speaking. The instructions in Romani were better understood by the pupils, and their answers to the teacher's questions confirmed this.

Translanguaging in the above example served the understanding of the task and the preparation for group work as a whole. All this was executed in frontal classroom work, which normally makes it challenging to maintain the students' attention, but which is the best-suited format for giving instructions before groups start working on the same tasks. Based on the video, we can conclude that translanguaging worked effectively in a teacher-initiated, deliberate, formal organisational setting. In the Hungarian context, Nádasi (2007; cf. also: Gillies and

Ashman 2003) mentions that frontal work is a first step among the main practical steps which set the scene for group work, which includes the preparation of both content and the mood for group work, the allocation or choice of group tasks, and the specification of the time available. In this mathematics class, the teachers' initial instructions, formulated in Hungarian, were unsuccessful in implementing these steps.

It is helpful to focus our attention on the question why the pupils are so distracted when the instructions are given at the outset. It could be explained by their excitement about the group work and the interesting, lifelike task ahead of them, but at the same time, they are disengaged with the details of task instructions. It is likely that some pupils lost the thread of understanding while listening to a complex instruction, and as a result they stopped paying attention. Whatever the reason is, the teacher consciously and successfully brings in the learners' home language to re-organise the situation. The instruction in Romani (repeated by one of the pupils) creates motivation and refocuses attention. By asking comprehension-check questions, the teacher can verify that the pupils understand the task accurately and in detail, and work can begin in small groups. This seemingly lengthy frontal preparation is a prerequisite for effective small group work, ensuring equal access to shared knowledge for all (Arató and Varga 2012: 143, 2015: 92). As the language practices of the learners here are very different from the language of instruction, learners also make use of the possibility of translanguaging communication within the group. They are also motivated to do so by the setting of the task in their home language.

In video 12 (*Translanguaging corriente*), excerpts can be seen from a fifth-grade history lesson in the upper years of primary education. The topic is Ancient Rome; its social history, and the social and material situation of the rich and the poor. Working in groups, the pupils were given sentences to decide which applied to the poor and which to the rich. This part of the lesson provides an obvious opportunity for translanguaging, as pupils work in teams, and interactions characterising frontal work, more easily linked to the language of instruction, are therefore avoided. Pupils are among themselves, speaking as they are comfortable, using their language resources in the way they are most comfortable to do. It is a common experience in Tiszavasvári and Szímő (Zemné) that in such situations the learners also use their linguistic resources based on Romani, although this is not clearly audible on the recording for technical reasons.

Scene 2 (video 12: 1.39–2.58) shows open-class feedback on the task. There are instances of translanguaging moments in this part, too. Solving the group task served the purpose of practice, while checking the task in two steps serves the purpose of systematising and consolidating knowledge. These stages are often problematic from a disciplinary and attention-focus point of view, but they are also of

paramount importance for the quality of students' work and for the accuracy of the subject-knowledge which is being checked. The open-class feedback sessions guarantee, through systematisation and consolidation, that the knowledge acquired is retained permanently and can be retrieved, but it is also always relevant to the task at hand and the problem-solving process specific to it. The task in this video was rendered suitable for collaborative work because of its challenging nature; group work, in turn, allowed the pupils to build confidence in the solution of the task, which would have been more daunting if they had had to work independently. The first part of the task was a discrete pairing task, in which the solutions could be clearly verified. The second part was oral text production, a partially open-ended task, in which Romani and Hungarian resources were used.

The teacher in charge of the lesson initiates translanguaging: she introduces the Romani word pair *csóro* 'poor' and *barvalo* 'rich'. The pupils' task is to say the word which describes best the social class whose habits are described in one-sentence statements. In the recording, pupils start by saying the answers in Hungarian, but soon, under the teacher's influence, the Romani terms are added. The pupils become increasingly motivated, and by the time the fourth group's turn comes to report their results, several group members decide to say the words referring to their solutions in Romani. In this scene, another type of classroom application of translanguaging is shown. In the checking of the group task, language resources related to Romani are introduced at the teacher's initiative, while the learners become increasingly motivated by the possibility of translingual learning.

The repetition of the Romani words *csóro* and *barvalo* after the reiterated statements concerning the various social groups helped the retention of the material learnt, inasmuch as this repetition served the purpose of consolidation. The selection of the statements by relevance to the social groups which they describe was useful in systematising new knowledge. Furthermore, translanguaging here was also used to build bridges between learners' existing knowledge and cognitive structures concerning poverty and wealth (Nahalka 2002; Richardson 2003) and the new knowledge which concerned abstract concepts used in the history lesson such as social class divisions in Ancient Rome. The domestication of the subject-content through translanguaging enhanced learners' ability to make sense of what they learned, thus avoiding both rote learning and loss of motivation. Translanguaging was also helpful in keeping pupils' attention focused during frontal task control. Checking group tasks can often be problematic. At this stage, the excitement of solving the task and the momentum of group reflection are gone, the task is completed. It is difficult to maintain attention in this situation, as only a single student is active at a time and the others are passive observers. Yet tasks must be checked in the interest of consolidation. The Romani words breaks the monotony of open-class feedback, and their repetition prompts passive learners to join in the activity. The

procedure helps learners to relate the new knowledge to their own community-based experience and existing conceptual frameworks (on community-based learning cf. Chapter 13, and for a different analysis of the video, cf. Chapter 10.

Video 14 (*Translation tasks in translanguaging*) was produced in the same classroom as video 12 analysed above, and the topic is the same. Translanguaging is also presented in a similar function, but in a different form. Here, too, learners work in groups, have to think about how the rich and the poor lived and then report back on what they have achieved. One group presents the lives of the poor in Hungarian, another in Romani, a third in Hungarian on the rich and a fourth in Romani on the rich. Translanguaging comes to the fore during the reporting of the solution alongside its role in group work, but in the open-class scene home-language resources are used in formal communication (and not in-group discussions). In this way, learners' linguistic resources related to Romani are re-positioned within the classroom: they are brought to the surface at the teacher's encouragement.

In scene 1, the Hungarian-speaking group starts the feedback session, followed by the Romani speaking group. At this point, translation becomes necessary, and the pupils respond enthusiastically to the teacher's request to translate the Romani utterance. We can see from the pupils' attitudes, reactions, and enthusiasm that there is mutual trust between the class and the teacher, which allows the differences in language practice to be bridged instantly. The pupils translate for the teacher when necessary. Trust between the teacher and the pupils is essential in this case, because in such a situation the roles are reversed: the learners are the sources of knowledge and the teacher is placed in the role of the learner. From what we have seen in the video, it can be concluded that classroom translanguaging works and contributes to the success of the learning process, even if the teacher does not fully understand the language practices of the learners. The rest of the lesson is spent actively applying the new knowledge to oral text production. Here, the teacher's expectation of parallel solutions in Romani and Hungarian is deliberate, and enhances the effectiveness of the learning process. First, the information concerning the lives of the rich and the poor is presented twice, once in Romani and once in Hungarian. Thus, repetition helps consolidation of new information. Second, all students have an equal chance to understand the new material fully, and Romani and Hungarian resources are equally shared in the groups. The translation for the teacher and the transformed teacher-student relationship motivates the learners in the personal sense: they feel readier to remember something seeing that it matters for the teacher. Finally, the new information is repeated through translation for the second time.

In the classroom scenes discussed above, we have seen examples of group-work preparation and monitoring, in which translanguaging provides effective help in organising the learning process. However, it is not only this form of learning

organisation that provides opportunities for the use of translanguaging. The next section (15.2) explores ways in which translanguaging and multimodality can support learning even in frontal work organisation, which, thanks to a translanguaging approach, accommodates individual learning paths despite the fact that differentiated instruction is not traditionally associated with frontal work.

15.2 Individualised learning pathways and accommodating learner diversity in science classes

Video 31 (*Multimodal experience in knowledge building*) was made in a science lesson in grade 5 in Szímő (Zemné). The lesson elements in the video are examined from two perspectives. First, we look at ways in which differentiated instruction, tailored to individual learners' language needs, influences activities in a science class about the environment. Second, we explore the way scientific methods of knowledge construction, such as observation, classification, and description, are implemented in a translanguaging environment.

The main aim of teaching the environmental science and natural science subject area is to develop the skills and habits needed for learning science subjects (biology, geography, chemistry, physics) in the upper grades. The parts of the lesson shown on the video are frontal, with mainly teacher-led activities requiring individual student responses. Furthermore, the learning process, as in all learning, involves the development of cognitive skills through the acquisition of knowledge-development methods. The methods of cognition in science are observation, description, comparison, and classification. These methods develop children's ability to observe, describe, identify and discriminate phenomena. This skill set underpins the learning of science subjects in the upper grades. Within this general framework, it is important that teachers provide as wide a range of individualised learning pathways as possible, tailored to learners' prior learning experience, thus enabling pupils from marginalised communities to experience equitable treatment at school.

Many of the pupils in Szímő (Zemné) benefit from personalised learning pathways, which improves their success at school. The science class is hardly the first one that comes to mind when considering the impact, and possible responses to, learners' marginalised socio-economic situation and non-standard language practices, which differ from the language of the school. Yet in the science class moments recorded in video 31, the teacher is looking for opportunities to reflect on

the children's complex language repertoires and bring them to the fore within the remit of her subject. For instance, when asking the pupils to point to and name the animals on the wall chart, she offers the possibility for the learners who go to the blackboard to say their answers in either of the languages which form their repertoire: Hungarian, Romani or Slovak. She formulates her instruction as follows: "You are learning the same topic with your teacher in Slovak lessons and in Hungarian in science lessons. We agreed that you can say their names in Romani, too" (video 31: 1.01–1.22). This caring and encouraging attitude is expressed not only in verbal language, but also in the teacher's smiling, happy attitude, facial expressions and gestures, which show that she is eager to hear the learner's response. An example of this is the teacher's request to name the rabbit in Romani, when she expresses a positive aesthetic value judgement which she associates with the Romani word.

(1) teacher *Nyuszi bizony. mondjad el, olyan szép neve van neki romául!*
'Yes, bunny. Tell me, it has such a beautiful name in Romani!'
pupil *Sosoj. Szlovákul zajac.*
'RABBIT. In Slovak it is *rabbit*.'

The teacher organises learning activities, develops the task, and in so doing, she diverts from the textbook material. Another example of the personalisation of learning materials is the identification of a strawberry in a picture. A fifth-grade boy cannot name the plant in the picture, but after the teacher relates it to his lived experience, reminding the pupil that his parents work with it, he immediately recognises and names the strawberry plant (video 31: 2.29–2.36):

(2) teacher *Melyiket nem tudod?* [odamegy a tanulóhoz] *Ez mi? Hát mit árulnak a szüleid mindig?*
'Which one do you not know?' [teacher goes to the pupil] 'What is this? What do your parents always sell?'
pupil *Hát . . .* [rájön a válaszra, elkezd írni]
'So . . . ' [finds the answer, starts writing]
teacher *Hát . . . na. Ugye, ugye!*
'So, yes. There you go!'

In this science lesson, the teacher uses frontal learning organisation and guided discussions in Hungarian to familiarise the pupils with the natural environment surrounding them, while also drawing on the pupils' emotions (e.g. their feelings about autumn or their experience with field plants). The learners express themselves

differently when prompted by the teacher and when they talk spontaneously with their peers: in the latter case they are more willing to speak in Romani. In a lesson organised frontally by a teacher with no Romani competence, translanguaging learning may occur primarily through the alternation of these speech situations. It is important to note that the teacher uses the learners's entire linguistic repertoire in a way which is deliberate and planned. One of the first steps in this process, as can be seen repeatedly in video 31, is the teacher's constant encouragement: "you can say it in Romani".

(3) teacher *Megkérlek* [name], *mondjad el mi mindent lehet elkészíteni krumpliból . . . te magyarul . . .* [name] *pedig romául* (video 31: 1.34–1.44)
'I ask you, [name], tell me what you can make with potatoes . . . you in Hungarian . . . and [name] in Romani'

This endeavour can be further strengthened by using various ways of organising learning, such as phenomenon-based teaching (Symeonidis and Schwarz 2016), which is particularly well-suited for science classes, or problem-based, project-based, inquiry-based or discovery-based teaching methods (Halász 2018). Cooperative techniques with a focus on differentiation and group work with elements of drama pedagogy can be similarly helpful alternatives to frontal work in supporting translanguaging through learning organisation.

In science education, targeted and continuous observation is necessary for understanding and conceptualisation. We want to teach students not only to *look at* the world around them but also to *look* and *see* what surrounds them. In this respect, it is important to remember that mere perception of realia is not the same as observation. Observation involves separating the essential features of a phenomenon, living being, or object from the non-essential ones. The teacher's list of observation criteria (whether written or spoken) can be of great help for learners because it enables them to describe the item selected for observation and to record the observed phenomena. In the science class in the video recording, the observation of the potato tuber is based on such a teacher-directed observation perspective. The teacher first presents the plant part, holding it up in a visible way, and then hands it to the pupils for direct observation and examination. "You can explain what it looks like and what we use it for. Touch it to see what it is like!" (video 34: 1.44–1.55).

The recognition/remembering level, which is the first, foundational level of learning, is used repeatedly by the teacher. Bloom (1956) created a now controversial, but in some respects useful taxonomy by mapping cognitive requirements in school onto levels of cognitive development. The facts and general information recalled about the potato thus represent the first level of learning, on which

pupils can build in the following stages of learning science subjects. Furthermore, the diversity of sensory involvement and the degree of learners' activity during learning enhance the retention of knowledge (Veverka 1994; Knudson, Cable, and Beck 1995): what we can see, hear, touch, taste, smell and what we discover by actively participating is more likely to be remembered. This is why recalling one's own experience of cooking is much better than recognising it merely from images (video 34: 3.10–3.19). It is for this reason that the teacher devises activities that require the use of several senses during the lesson, providing realia that activate several senses, such as tasting (peanuts), touching (corn, rose hip leaves), smelling (smell of onion leaves) and seeing (wall hangings, real plants). Learners' own experience and pre-existing knowledge from their home environments is more readily activated through language practices which are assigned to the same environment; in this case, Romani. Enhancing learners' sensory experience is a key stage at which translanguaging can be introduced in the learning of science subjects. This process is effectively facilitated by the teacher's praise and acknowledgement in response to a specific situation, in which students spontaneously start speaking together.

Translanguaging encourages students to speak and discuss their experience in science classes, too, just like in all learning. In order to prepare learners for the understanding and confident use of exact scientific terminology expected in the upper grades, it is helpful to recall during the lessons the children's home-based experience. This learning experience is enhanced by the involvement of the senses in the learning process in a multi-faceted and complex manner, which is planned and prepared by the teacher in advance. Building on the entirety of pupils' complex language repertoire enhances both the recollection of their pre-existing experience from their home environment and the multisensory approach to the learning of new material. The development of scientific methods of cognition at a foundational level, in particular observation, classification, and description, as well as related sub-skills, can be more effectively achieved through the spontaneous or planned use of learners' home language in science classes.

15.3 Learning and learning organisation in a translanguaging pedagogical reality

Among the most important needs and requirements of Roma children of primary school age in a school context there is one central factor, that is, the need to be able to show their personality and identity in its entirety at school. They need to be accepted and appreciated in a way which is inclusive of their home culture and

linguistic resources. It is the school's duty to teach them basic skills, including social skills. It is a place where the behaviours and social skills expected in society can be practised. The school should enable these pupils to develop a sense of responsibility for their own learning and teach them to learn. Ensuring optimal development according to individual abilities is a precondition of this. The constructivist concept of learning reflects these aspects and builds on the knowledge, experience and thus linguistic resources that the students bring with themselves.

According to the constructivist approach, the learner not only absorbs knowledge, but also creates it on the basis of his or her previously acquired knowledge. Prior knowledge is a system in our brain that interprets phenomena in the external world and predicts changes that will occur. The organisation of knowledge in people's cognitive system evolves in interaction with their physical and social experience in the outside world (Nahalka 2002; Richardson 2003; Virág 2013). Roma learners' individual prior knowledge both in Hungary and Slovakia is rooted in social interactions which occur in a language different from the language of formal social interactions at school, and it is constructed through social and cultural habits which are different from the pre-existing knowledge expected at school, on which institutional knowledge is built. It is therefore desirable that Roma learners' full linguistic repertoire is present in the classroom and that the teacher can build on their prior knowledge, engaging them actively in cognitive processing based on the cognitive patterns available specifically to them. Effective learning is, thus, active cognitive engagement. Hence, the organisation of learning can be effective only if the student is active, if they can communicate with peers while learning, thus using multiple resources for learning. It is also essential to encounter real-life problems and to take account of individual characteristics as far as possible (cf. the principles of constructivist pedagogy: Phillips 2000; Nahalka 2002).

Translanguaging can be linked to the aims and principles of constructivist pedagogy in a number of ways, thereby increasing learning effectiveness for Roma students. The first principle of constructivist learning models is to assess learners' knowledge and interests. Awareness and incorporation of learners' linguistic repertoire into the learning process is part of this and can be successfully applied even if the teacher does not have Romani language resources. Let us repeat: the most important goal is the student's effective learning, not the teacher's explanatory, knowledge-transferring activity. The bridge that is to be built ("constructed") by students between their existing knowledge structures and the new knowledge to be acquired is supported by translanguaging learning. The often abstract Hungarian-language learning material remains in many cases only "pseudo-knowledge", which the child is unable to connect to their existing knowledge schemata which they use to order reality.

Groups of learners are always heterogenous, although their degree of heterogeneity varies. Diversity of methods and optional tasks can help students to take increasing responsibility for their own learning and to follow the path that feels best for them. Translanguaging learning spaces are contributing to this, as learners can interact with their peers, respond to the teacher, take notes and learn in the language they are most comfortable with. The teacher trusts that her students will try to optimise their own learning by choosing the most suitable language resources.

The constructivist view of learning is not always compatible with cooperative learning, but it does rely on the principle of social learning. The facilitating environment provided by teams of learners plays an important role in the development of individual knowledge construction. In particular, learners' knowledge constructs are closer to each other's than to the teachers', which means that through collaborative learning and peer dialogue learners have the potential to move each other to the next stage of development without noticing explicitly that "learning" took place (Phillips 2000; Nahalka 2002). It is possible that as little as a Romani phrase in group work or a reference by a peer to a shared experience is sufficient to make the learner realise what is at stake in the material that is to be learned.

If learners are active and remain focused on tasks, without wasting time, this will have a positive impact on learning outcomes. This is most likely to be achieved through group or pair work, cooperative learning organisation techniques and collaborative task setting. Continuous work also increases the number of parallel interactions, which is also important for effectiveness. Participants in the learning process acquire new information, skills, and abilities *from* or *through* each other. In a translanguaging classroom, parallel interactions are perhaps even more important than in a traditional classroom. The different learning activities and work forms create different communicative situations, which, in turn, contribute to the exploitation and expansion of the learners' entire linguistic repertoire.

Just as in everyday life, in a classroom there are different situations in which people speak. Some classroom-based speech situations (e.g. group work, pair work, teacher-initiated heterogeneous language behaviour in an open-class discussion) make space for translanguaging exchange and the exploitation of the full language repertoire. This is why the conscious and varied organisation of learning in the translanguaging classroom is of particular importance. The full linguistic repertoire is present in a translanguaging classroom, sometimes on the surface and sometimes in deeper layers, but it is constantly present; García et al. call this the *translanguaging corriente* (García, Ibarra Johnson, and Seltzer 2016: xi-xii). It is well worth bringing this *corriente* to the surface by consciously and deliberately putting it at the service of learning.

Another important pedagogical theory which is related to the general didactical implications of the translanguaging classroom is adaptive education (Lénárd and Rapos 2004) and the concept of the adaptive-inclusive school, which has been adopted in the Hungarian context in recent decades (Gaskó et al. 2011) as education theorists were searching for a framework which allows education to formulate relevant responses to social and economic changes. Adaptivity first appeared as a pedagogical concept some twenty years ago (Glasersfeld 1995) and became central to constructive pedagogy. One of the basic tenets of the latter is that the function of cognition is adaptive, it serves the organisation of the experiential world instead of discovering "objective reality". An important factor in evaluating knowledge, therefore, is its adaptivity: the extent to which it shows flexibility in ordering and structuring experience. The term, originally borrowed from evolutionary biology, made its way into the human sciences, including theories of learning and teaching (e.g. Louis, Marks, and Kruse 1996; Lénárd and Rapos 2004; Garmston and Wellman 1999). Adaptive teaching (Nádasi 2010) is sometimes also used with reference to *differentiated instruction,* which is a technical term referring to pedagogical approaches which take into account individual differences between learners (Heacox 2017) when designing learning activities and/or setting up groups. The scope of adaptivity has subsequently been broadened, as education is a process in which teachers and school leaders play a vital role, and collaboration between the various stakeholders attached to schools must also be taken into consideration. Therefore, the term adaptive school was introduced to include the phenomena discussed above, but also to go beyond it.

The proponents of adaptive schools also explore the pedagogical aspects of social inequalities (Bourdieu 1982), child-centred education, education for all, as far as possible, and education for acceptance. The term *adaptive school* overlaps with the notions of inclusive school, integrating school, open school, democratic school, and, ultimately transcaring schools (cf. Chapter 13), although the latter have not been adopted in the Hungarian context yet. All these seek to respond to the same social challenges that have emerged recently,, particularly the issue of social inequalities in the context of education (cf. Bourdieu 1982), and possible responses to it such as learner-centred or child-centred education, schooling which is effective to all, and education which sensitises learners to accept all forms of otherness. Directions which have been outlined over the decades within this trend include critical pedagogy (Giroux 1988), the concept of democratic schools (Rodriguez-Romero 2008; Bauman 2000), comprehensive schools (Wraga 1998; Wiborg 2007), the pedagogy of inclusion (Halstead and Haydon 2008), individually-tailored education (Hopkins 2006), and intercultural education (McLaren and Farahmandpur 2005; Marginson and Sawir 2011). These approaches in education

theory provide a framework which fits in well with translanguaging, and which can support translanguaging with effective pedagogical tools.

Adaptive education focuses on learning and the organisation of learning but argues that for true innovation and methodological renewal to take place, the entire school's pedagogical thinking as well as the general views on pedagogy and education must change. This wholescale reinterpretation of the educational environment is what we can see in the work of teachers experimenting with translanguaging, given that without real conviction, trust, and acceptance, teachers find the introduction of Romani in the classroom problematic. Those who have shown lasting commitment are the teachers who have been more open, who have come to see translanguaging as part of their personal pedagogical renewal. Openness and an attitude which actively seeks solutions to a challenging educational setting were among the most important prerequisites which prompted individual teachers to adopt a translanguaging stance. After starting their experiments with translanguaging, the teachers themselves have been constantly changing and adapting their behaviours, with those seriously engaged in the project becoming increasingly committed. There is an important individual dimension to this, too. Each teacher seeks opportunities and develops techniques and tools according to their existing methodological toolkit and pedagogical views. As a result, translanguaging learning is diverse, and teachers implement a translanguaging orientation by filtering it through their own personality.

Another point where adaptive teaching and the translanguaging pedagogical attitude converge is that they avoid responding to differences and challenges faced by schools with a corrective, remedial strategy. They focus instead on prevention and enabling. In adaptive schools, differences between learners are seen as a resource, learners are encouraged to be themselves, and teaching is understood as adaptive learning organisation (Lénárd and Rapos 2004: 9; Gaskó et al. 2011). The adaptive approach focuses on the child, with three basic principles in mind: connectedness (belonging, being important to others), competence (being able to perform and believing in oneself), and autonomy (being progressively independent, in control of one's own actions). These principles show overlaps with features of transcaring, particularly authentic care and search for competences (cf. Chapter 13). These principles form the foundations of teachers' work, characterised by stimulation: providing tasks that are optional and open to students' initiative; support: helping the students to do what they cannot do on their own; and trust: positive expectations, personalised constructive feedback (Lénárd and Rapos 2004: 9–10; Gaskó et al. 2011).

With regards to learning organisation, the adaptive approach considers interactive learning organisation strategies and methods important because of the need for relationships (including relationships with peers) which constitute the basis of social learning. This is supplemented by a number of other learning

strategies. Independent learning is essential for personal development and for enhancing learners' autonomy, while experiential learning is valuable because it is learner-centred and activity-oriented, enhancing deeper understanding. There is also a place for a direct learning organisation strategy based on strong teacher guidance (e.g. in the stages illustrated in the examples in section 15.1, in which frontal work has the purpose of systematising and consolidating the outcome of group work, or in section 15.2, where individual learning paths are supported in frontal work). At the same time, we should be aware that frontal approaches are only of limited use for the multifaceted development of skills (Lénárd and Rapos 2006: 8–24; Gaskó et al. 2011). The same limitations of frontal work can be formulated for translanguaging. Non-standard, fluid linguistic practices can be built into frontal work and individual, independent learning, but they are best exploited in communication with peers whose ways of speaking rely on similarly fluid practices. Indirect learning strategies which encourage interactivity, facilitating effectively students' thinking and learning processes, are also well suited for the introduction of translanguaging.

An adaptive and inclusive school does not simply integrate children of various backgrounds out of necessity. It is rather a type of school which is committed to creating a learning environment which suits learners of all backgrounds, while recognising the limited possibilities of the school as a mass educational institution. Groups of learners may be diverse from a number of perspectives, including family background, age, experience, prior knowledge, ways of speaking, perceptions of school. In such diverse groups it is imperative to acknowledge, and take as a starting point for pedagogical work, the fact that every learner has different strengths and needs different types of support (Rapos et al. 2011: 33; Gaskó et al. 2011).

15.4 Conclusion: Adaptive-inclusive schools and translanguaging

The adaptive-inclusive school concept presented and proposed by Rapos et al. (2011) is not tied to a particular school system; instead, it emphasises the power of local values, opportunities and solutions in driving innovation. Local teachers in Tiszavasvári and Szimő experiment with translanguaging approaches in a way which weighs up local specificities and possibilities. As a result of continuous reflection, both their professional competence and the local adaptations of the concept improve. External support for such initiatives is important but the adaptation to local circumstances of frameworks such as adaptive schools and translanguaging is key to their success. The concept of adaptive-inclusive schools is based on five core

values, which form the essence of the theory. These principles are interrelated and mutually complement each other.

The first of these values is adaptivity, which means that the school's programme is not normatively driven but reactive, developed in response to the changing needs of the community it serves, and seeking to address local challenges. Adaptivity, therefore, involves acknowledgement of continuously changing circumstances and reflection. Therefore, adaptivity is not adaptation to local needs but a continuous, constructive interaction with the environment. It is in this spirit that the translanguaging project was introduced and is developed in Tiszavasvári and Szímő (Zemné), where it was launched in response to the difficulties of educating Roma students. External, research-based impulses have been instrumental in tackling this challenge, but it is now down to individual teachers, helped by communication with each other and with the researchers, to work out suitable practices to deal with the challenge. Individual teachers' practices vary, however, as do the age of the pupils, the composition of the groups of pupils, and the specificities of the subjects taught.

The second principle is learning-centred education, which is linked to alternative pedagogical approaches and the need for constant renewal in the face of constant change. It is in sharp contrast to schools' teaching-centred approaches and seeks to link the values of learning and community. The teachers working on the project recognised that their own methodological innovation and institutional reforms will be successful only if they serve the pupils' learning. Translanguaging has brought about a change in learning organisation, too, prompting the school to place increasing focus on students' learning from peers. Peer learning was a by-product of teachers' initial experience, which showed that students can most effectively use their Romani-language resources to enhance their learning when communicating with each other.

Similar to transcollaboration (discussed in Chapter 13) the principle of communality is centred on belonging, relationships, connectedness, and cooperation. In Tiszavasvári, too, multi-directional dialogues and cooperation were initiated concerning the work in the school, including the discussions between the nursery's and the school's management, between parents and teachers, among teachers open to translanguaging, academics, researchers and practising teachers. All that is entailed by the practice of translanguaging in Tiszavasvári is the result of a wide-ranging network of learning (cf. learning community in Chapter 13).

Constant reflection on and questioning of the categories along which we organise our thinking is the fourth principle. It enables us to develop new insights into the "truths", ideologically and historically mediated patterns of thought, through which we describe and interpret the world. As our conceptual thinking evolves, classificatory and categorical patterns are formed in our mind. Deconstructing

such patterns allows us to question the assumptions on which they were built and to overcome the idea of a pre-existing, "objective", ontological reality. The first such step on the journey to build a translanguaging stance is if teachers are able to let go of the idea that there is a "natural" link between teaching and a single named language, and, as a result, she welcomes students' heterogenous ways of speaking at school. Unfortunately, not all teachers in Tiszavasvári have been able to revisit and revise the ideas which have underpinned their life and professional career for decades. The fifth principle is that of identity, and it draws attention to the fact that together with the learners' identity, the identity of the school is shaped, too. The emphasis is on interaction between the two. It is interesting to see in Tiszavasvári the way in which the school evolves in interaction with its learners: teachers participate in professional conferences and project applications which are now inclusive of their commitment to translanguaging. The school's operations concerning learners' identity building have contributed to shaping both the teachers' and the school's identity.

To summarise, pedagogical practice shows that translanguaging in learning is not an end in itself. As part of conscious and adaptable pedagogical practices, however, it can be a starting point to moving schools in the direction of learning-centred education by integrating the students' home language and cultural practices into school-based learning and teaching. This requires, first, a conscious and ongoing reflection on the part of teachers concerning the entirety of pedagogical work; second, the planning and implementation of effective learning organisation, and finally, a refinement of pedagogical thinking, concerning, particularly, the concept of learning and the type of school which can support translanguaging best.

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