Experiences from Austria:
Practices of UDL-Infused, Inclusive School Development in Secondary School

The Learning Environment at Schulzentrum Donaustadt
Our School and Secondary Education in Austria

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Figure 1: Pupils of the Schulzentrum Donaustadt. This and all other photos were provided with kind permission of Schulzentrum Donaustadt (where indicated, permission from legal guardians and children has been obtained).

Table of contents

The year groups are comprised of three concurrently run classes. Those are inclusively run as core groups. Numbers of pupils per class vary. There are two larger core groups which are formally run as integrative classes and one smaller core group. The purpose of the latter is to provide a safe space for pupils (still) benefitting from such a setting due to their current social skills and development. For the time being the third smaller core group is composed of individually assigned and applicable curricula[1]. The long-term goal over the duration of four years is an assimilation of pupil numbers per class, as a specific safe space for some children and youth is getting obsolete through support and individual growth. Class composition is reviewed every sixth week in cooperation of school principal and a specially trained member of staff[2]. This ensures flexibility and fluidity between core groups. However, the ultimate decision on class composition is up to teams of teachers, which consist of SED-teachers specialist subject teachers, general secondary school teachers and a specialist member of staff competent in monitoring relations.

Concept idea

The concept of teaching at Schulzentrum Donaustadt has grown over the last decades and can be characterized as ongoing process, drawing on experiences and practices established at other schools. Educational institutions inspiring the concept idea of teaching at Schulzentrum Donaustadt were schools such as 'Klex' (Graz, Austria), 'Integrative LWS Brigittenau' (Vienna, Austria), 'Lerngemeinschaft 15' (Vienna, Austria) and 'Evangelischen Schule Berlin Mitte' (Berlin, Germany) to name just a few and encompasses elements of the Dalton Plan[3] and UDL. The latter is understood as an approach to create accessible environments that enable each pupil to learn in an optimised way. In doing so potential limitations are no longer attributed to a pupil but within the given environment. Working with UDL offers strategies, methods, and tools for teaching to strengthen the pupils' competencies. Moreover, UDL is used to foster and facilitate reflection on lesson goals and their potential adaptation ensure successful learning in a very diverse group of pupils. The focus of teaching at Schulzentrum Donaustadt, including but not limited to UDL, is an increase of self-responsibility for one's own learning as well as choice and arrangement of individually fitting methods and materials.

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[1] There are different types of official curricula in Vienna, three of which are in application at the LWS Donaustadt. One curriculum defines subjects, subject matter and lesson allocation for mainstream education in the first four years of secondary school. One curriculum is designed as a framework for pupils studying in general special needs education, outlining a framework for learning for grades one to eight. The third curriculum is addressed to pupils who learn with higher levels of support than outlined in the general special needs education curriculum and covers grades one to nine. Pupils are assigned a curriculum to frame their studies and work. As Assessment of performance is outlined differently in those curricula, too, assignment of a specific curriculum impacts assessment as well.

[2] This member of staff holds a specific professional title ('Psychagogin') with specific professional training. The field of work of such a person with this occupational profile is the intersection of Psychology and Pedagogy, which implies a special focus on social and emotional development, analysis and support if needed. 'Psychagogik' is deeply rooted in Freudian psychoanalysis and is conceptually close to the therapeutic technique of child psychoanalysis. Professional training in this field is mostly a Viennese specificity.

[3] The Dalton Plan refers to a „secondary-education technique" which has been developed by Helen Parkhurst in 1919. The pupils were able to decide on their own schedule, which has been dividied into different assignments.(https://www.britannica.com/topic/Dalton-Plan)

UDL-Infused Practices: Examples of Teaching Approaches and Learning Opportunities

I. Educational practices to facilitate learning

Using UDL for explorative Learning: Project work in the Research-Studio

Explorative learning in the research studio is organised as project work in form of a three-day, biannual workshop for each grade level. Premises of the research studio are used for Box-Lessons when not occupied by a project specific learning environment setup. Accordingly, pupils do know the premises of the research studio as part of their weekly school-life and know it as place where they are responsible for organizing their own learning. During those biannual research-studio workshops all pupils work on a set topic, which

Figure 2: Introductory centre-piece in the morning circle kick-starting the research-studio workshop on water.

provides a wide range for individual exploration and curiosity. Topics are *Light and Colour*, *The Four Elements*, *It's All About the Egg*, *Prehistoric Times, Tiny Life on Large Scale* (Insects) and *Marble Runs*, to give some examples. To facilitate pupil engagement a topic-specific learning environment is set up in the research-studio, with different sites for sub-topics and a lot of scope for imagination and curiosity. The aim is to really capture the pupil's interest through wonder and amazement. To guide this wonder-induced inquisitiveness the three-day workshop follows a certain structure to set a framework in which pupils can pursue the exploration of the topic through work in groups of two to approximately five pupils. This structure gains the centre stage of the discussion at the very beginning of the research-studio workshop. All pupils come together at the start of the first day when the topic of the project work is revealed through a centrepiece in the morning circle (see *Figure 2*).

Subsequently the structural outline of the three days and the way research is done is recalled and outlined through visualising cards by the group:

1. Coming up with a question of personal interest
2. Making and documenting assumptions and ideas
3. Developing strategies and methods for answering the question and finding solutions to problems
4. Induce change and action through application and execution of developed strategies and methods (It is time to test one's assumptions hands on!)
5. Observing induced change and/or action closely
6. Documenting the observed process and the execution of strategy application
7. Evaluating, analysing, and interpreting the documented process
8. Presenting one's findings to the group

After setting the framework for the entire workshop the day's schedule is discussed and visualised. An example for the schedule of the first day of the research studio workshop is given in *Figure 2*.

Welcome to the research studio workshop on water!	
08:00 – 09:40	Planning and discussing the workshop
09:40 – 10:00	Break
10:00 – 11:50	Finding and choosing a question to work on
11:50 – 12:00	Break
12:00 – 13:00	Cleanup, completing the research diary and coming together in the group for closure
	Lunch

Figure 3: Exemplary structure of the first day of explorative learning in the research studio workshop.

After each pupil is equipped with a research diary and a notepad, they set out for a first exploration of the assembled, topic-specific learning environment. Pupils should not talk to each other during this first investigation and are encouraged to take notes about aspects of their own interest. Where necessary pupils are supported in their exploration and note-taking, but an emphasis on independent, self-determined inquiry within the learning environment is always maintained. To illustrate a possible setup for such a learning environment, see *Figure 4*.

After this first round of exploration teachers and pupils come back together as a group and collect everything that was observable. Pupils share aspects they noted in the learning environment and topics are collected and clustered on index cards and the blackboard. Individual aspects and subtopics are discussed and connections to prior knowledge are established.

Through this unit pupils come up with questions of personal interest on those very aspects and subtopics and team up in small groups accordingly. Concerning adequate question pointers are given regarding properties of a good research question, especially with regards to an adequate amount of work indicated by a specific question. Possible questions by pupils on the workshop topic 'water' might be: 'How does rainfall work?' or 'What creeps and crawls in a pond?' and many others. The groups assemble according to interest constitute research teams for the entire process.

Subsequently, pupils work on step two and try to make up their own mind on what they decided to find out about, using their existing knowledge. Assisting teachers encourage pupils to document their ideas in the research diary and to not lose track of their actual question and the time. Having worked out possible explanations and solutions to the groups' questions or problems pupils now set out to develop a plan on checking or elaborating those assumptions, by means of coming up with very specific strategies and methods for answering the question and to find solutions to problems. This happens by consulting books, web-information, teachers and other staff, and pupils' own experiences in day-to-day life as well as ingenious thought. At this step of the research process, assistance by teachers consists mostly in giving pointers regarding prior knowledge or concerning adequate sources for strategy development and in preventing premature embarkment on action before the process is planned properly. Where needed scaffolds and one-to-one support are put in place by teachers to ensure all groups do make progress on their question and every group member can take part to the fullest.

Upon finishing the planning and development phase it's hands-on time: steps four to six are a phase of bustling action and activity. Depending on the research question or problem groups gather material, conduct experiments, go on a mini-fieldtrip/excursion and anything really that they think might lead them to figuring out and checking their question.

Figure 4: Exemplary setups for a learning environment on water.

Pupils can use the entire premises of the research studio, science equipment, tablets, and a variety of everyday objects for their enquiry.
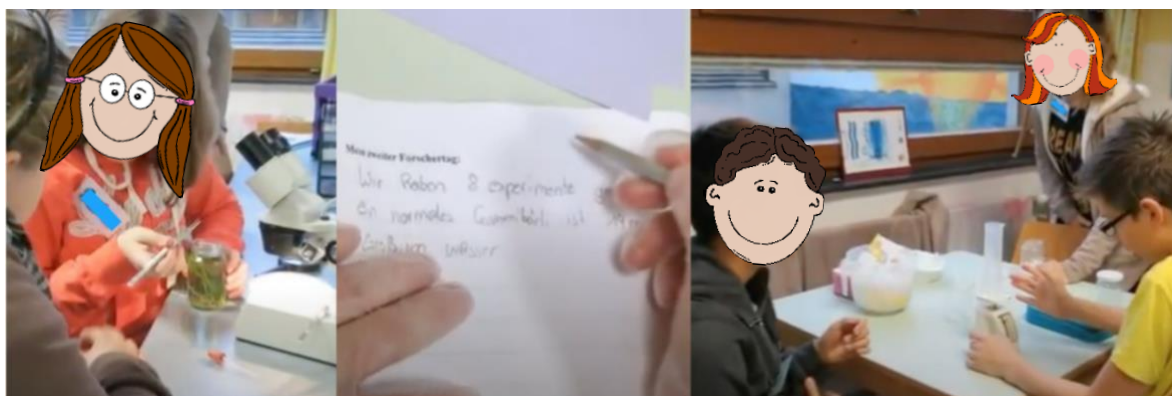

Figure 5: Pupils working on their research questions.

If additional and/or specific materials are needed (e.g., a fresh fish to find out about 'How do fish breathe in water?'), pupils can put in a request with a teacher, whereupon it is discussed where one might get the necessary material (or whether there might be other ways to figure things out if it would to be too difficult to get material). Some pupils might reach step four on day one of the research studio workshop, most groups however start to work on this part on day two. Independent of individual process, though, each workshop day ends in communal closure: after dedicated time for clean-up and for catching up with one's research diary (if necessary) all groups and teachers come together to wrap up the day, reflect on proceedings and to answer questions concerning the upcoming day. Likewise, each of the subsequent days are started in the same manner in a morning circle.

Through the whole process of steps four to seven of the research studio workshop teachers are on hand support and monitor pupils learning yet try to interfere as little as possible (but of course as much as needed), to allow for independent and explorative work. Throughout this change-inducing and strategy-application phase pupils are encouraged to observe proceedings very closely and to document every step of their enquiry in a form that is suitable to them. Accordingly, the emphasis is on whether pupils can use their documentation to make sense of their question and not on spelling or similar. The use of the research diary for documentation is prompted and support given in note-taking or similar if necessary.

Figure 6: Pupils collecting and clustering aspects of personal interest and deriving questions on those subtopics.

Pupils are reminded of the necessity to present their learning in a way so others can understand it as well, this includes documentation. During step seven pupils try to make sense of what they observed and found out which culminates in developing an adequate way to present one's findings to other groups. Teachers are on hand to help with interpretations and support pupils during this vital step by asking questions rather than just giving answers and pointing out possible directions of analysis.

Figure 7: Pupils presenting the results of their individual explorative learning process in research groups.

Day three of the research studio workshop is used to wrap up one's research and to work on the presentation of one's results and findings. The amount of time spent on each of the two will vary from group to group, as possible methods of presentation and the general speed of work will differ between groups and topics. Therefore, pupils might still be concerned with understanding their research problem themselves on day three or might already be working on elaborate presentation techniques or props. After a dedicated time for clean-up everyone — pupils and teachers— comes together to share the results of their explorative learning. Pupils do listen to each other very attentively and are reminded of the necessity to appreciate what others have to show and say, if need be.

Achievement of pupils are celebrated in the group and an emphasis is placed on highlighting effort and ingenuity of learning. Pupils collecting and clustering aspects of personal interest and deriving questions on those subtopics.

Using UDL for self-determined learning: Science Boxes

Developed as a sub element of establishing the research studio, so-called 'Science Boxes'-lessons take place in the research studio's premises. During those lessons, the responsibility for their learning is handed over to pupils as they are free to choose from a variety of 231 different boxes shelved in the research studio. Drawing from the multitude of interests, materials, and resources within the year-group teams of teachers' topic-specific boxes were developed as materials for pupils to use independently. Those boxes contain a wide range of topics covering correspondingly various sub-aspects of subject curriculum. To this effect topics range from Electricity, The Sioux Nation of Indians, Picasso and Healthy Teeth to Cryptography, to give just a few examples. Different levels of difficulty are either indicated through symbols next to the title of the box and/or the respective exercises can be individually varied in interaction with the included materials and content matter. Furthermore, the perceived difficulty of a box can vary due to the utilisation of different methods of teaching and learning in different boxes.

Lessons are organised in double periods to allow necessary time for self-determined, individual learning. During those two conjoint lessons pupils manage their time mainly themselves, allowing for individually paced learning.

However, pupils are not expected to manage the set time entirely without help or support: universal rules are set for individually paced work to guide and initiate effective, self-determined time management. Those rules comprise getting organised before setting out for action concerning needed materials and upcoming tasks, reminders to read instructions to end prior to getting into the work process itself and those very instructions on the handling and usage of the specific box. Furthermore, pupils keep track of their work by means of a Protocol of Learning, which encompasses their steps and outcomes. At the beginning of the academic year pupils are instructed on how learning in box-lesson units works by means of a letter. This contains common rules as well as expectations and is discussed and to be kept by pupils for later consultation. Pupils are able to self-check their work as answers and solutions are included on a green sheet of paper titled 'Solutions' in every single box. Additionally, individual progress concerning self-determined work in box lessons is discussed and reflected on with a teacher in personal meetings. Those are scheduled once a semester and incorporate the completion of an evaluation form, which is to be signed by pupil and teacher. The individual, self-determined work during the main part of each Box-Lesson is followed by a clearly defined, ritualised closure of the session, during which pupils present their newly acquired knowledge, skills, or experiences of progress to each other in a group setting. Those presentations are framed by teachers and staff as special occasions where "every child is at the centre of attention for a while". Accordingly, pupils listen to each other very mindfully and focused—something that is promoted and enforced by teachers, too, if necessity arises. Furthermore, conspicuous, and new aspects are sought to be highlighted in presentations through questions like 'What is special about what you've just learned?'. Pupils are responsible for having their work accounted for by a teacher at the end of the unit via signature in their Learning Protocol.

The allocation of time for those lessons is similar to research studio lesson allotments enabled through a creative use of curriculum planning and lesson allocation. The majority of the lessons used to cover teaching in Science-Box-lessons is particularly taken from annual allotments of natural sciences lessons, as many of the covered topics do fall into this curricular sphere (see also *Figure 8*). This creative usage is possible because natural sciences operate within a framework curriculum in Vienna, which means that a certain degree of flexibility regarding covered topics is innate to delivering subject matters. To keep Boxes in good, ready-to-use order and updated throughout the months and years clearly assigned responsibility is being assigned. For a box to be approved for the lessons in the research studio, it needs to meet certain requirements. The box should be designed in a way that…

> …it provides content and material for two lesson units of learning.
> …pupils can work independently on the topic.
> …allows for different levels of difficulty and differentiation.
> …pupils who are on either side of the spectrum of individual competences can find boxes to learn with ideal challenge, too.
> …task cards (orange sheets) are phrased precisely, short und understandably so pupils can understand them.
> …they contain as many materials and supplies for creative work as possible.

> ...they include solution cards (green sheets) for pupils to check their work themselves or present solutions on the backside of the included material.
> ...they include an inventory on the inside of the lid.
> ...they include 20 copies of any worksheet in a document sleeve.
> ... can be passed on (either digital or in paper) to the members of staff responsible for management and up-keeping of the research studio for replenishment or restoration.

A Letter to You on Lessons in the Research Studio

Dear ……….…………………..,

A very warm welcome to the research studio! For two hours a week you are free to learn self-determinedly according to your very own needs and inclinations on topics of your personal choice. The pace of learning is yours to decide on.

How does it work?

The shelves in the research studio contain numbered boxes.

Each box holds one topic for you to learn about.

You choose a topic, get the box from the shelve, open it at your desk and you are ready to go.

You have two hours two lesson units to work on a box.

In each box there is an orange task card, which tells you what to do.

Worksheets and necessary materials are included in the box.

Every completed task can be checked with the green solution card or with a self-check on the back of the material.

You should file results of any tasks you completed in your folder and record the topics you have worked on in your Protocol of Learning.

When the two units are over you take your work to a teacher and have it signed next to the day of completion in your Protocol of Learning.

What is expected from you?

Work quietly and focused while you are learning with a box. If you are stuck on a task or are unsure how to proceed ask a teacher for advise or support. You are expected to return the box you have worked on complete and in order to the shelve you took it from. If you have finished up materials or supplies inside the box you should stock it up or inform a teacher.

We wish you a lot of fun and success in learning with the boxes!

Your Team of Teachers of the Research Studio

Figure 8: Explanatory letter to pupils on work during Box-Lessons, which is to be kept for future reference.

Content:
- 1 pack of sherbet powder
- 1 white saucer
- 1 magnifying glass
- Toothpicks
- 2 drinking glasses
- 1 teaspoon
- 1 pack of baking powder
- Icing sugar
- Citric acid
- 1 task card (orange sheet)
- 3 white index cards with experiment instructions
- 2 solution cards (green sheets)

Learning outcome:
Pupils discover the different constituents of sherbet powder and the taste of each ingredient (sugar, citric acid, sodium hydrogen carbonate). Pupils produce their own sherbet powder with the individual ingredients.

Figure 9: Science Boxes on the topic: 'Experiments with Sherbet Powder'.

Using UDL for independent learning: Subject-themed classrooms as dedicated learning environments and work with assignment plans

As a school we decided to use independent learning in differently themed rooms by means of assignment plans, allowing pupils to work at their own pace within smaller, inclusive groups. Additionally, this concept creates more opportunities for individual and customised support. Concerning the role of a teacher regarding independent learning a shift in focus from instruction to guidance and support is necessary. By having dedicated units for such educational practices, valuable opportunities for focused observation of individual pupils and groups are unlocked for teachers. Those in turn are the foundation of weekly reviews and discussions within the team of teachers who jointly work with one-year groups, which inform the given support during units of independent learning and beyond. Resulting from the decision for this concept of teaching and learning accessible environments for learning, as sensitive to diversity as possible, were designed in those subject-themed classrooms. Teaching structure and planning concerning independent learning units is build and done comprehensively for all pupils. Through working independently in their learning pupils can benefit and develop in several areas of competency: independence, self-action, self-assessment, self-organisation, personal initiative, self-responsibility, communication, and social skills, developing a sense of tidiness or structuring one's surroundings, tolerance, acceptance, and time management, to name just the most important ones. Development of those integral competencies is additionally fostered through intensive work in a close-knit, year-based team of teachers and through project work and other activities across core groups.

The introduction of subject-themed classrooms and the use of assignment plans complement and mutually depend on each other. In addition, independent learning units are intertwined

with more conventional instruction and teaching units with mutual dependencies. Therefore, it is necessary to describe those connections beforehand. Despite a relatively high proportion of independent learning units, every school-day starts with a core group unit and an additional lesson in this configuration is planned throughout the day. Those lessons are used to reflect on the previous days' work and plan the next steps of learning, for which pupils use their individual BuddyBooks (see chapter II.). The particular purpose of those units and lessons in core groups is, apart from organisational functions, to foster the development of social skills. The framework of a set group, which can be seen nest-like within the wider school community, enables pupils to practice their skills and competencies on a smaller scale in a modestly sized community, rather than having to always navigate an entire year group. In addition to independent work units, each core group does have a fixed lesson in each key subject (German, Mathematics and English), which is used to introduce new subject matters communally. Daily study time, part of the setup as a full-day school and used to work on homework, assignments, and prep work for tests, is organised in core groups, too. Organising independent learning units through use of assignment plans and themed classrooms, therefore enables mingling between pupils of different core groups, allowing them to get to know each other well.

Concerning the environment for individual learning units, by means of assignment plans, a setup of subject-specific themed classrooms was implemented. Pupils use assignment plans to structure and direct their learning, which operate within a set period that can be individually apportioned. Time for independent learning is structured in fixed, daily lesson units. During this time of the school day core groups dissolve and topics can be worked on in more heterogenous groups within the prepped learning environment. Pupils are free to choose their environment and can allocate time freely to different tasks, which fosters development of self-organisation skills. Being able to use one's time flexibly, enables pupils to thoroughly engage with topics or content and to pursue or deepen interests. Assignment plans can be seen as scaffolding and structuring tools to facilitate and initiate the independence in pupils work that we strive for. Moreover, the use of assignment plans for individual learning intend to ensure success and/or development of self-regulation and orientation for pupils and are introduced, discussed, and reviewed extensively. Pupils are guided to increasingly manage those plans by themselves, under teachers' guidance where necessary. At the beginning teachers still assign what is to be worked on where and when, modelling and fostering independent management of time and tasks, which is the goal of this process. Pupils document their time allotments for work in each learning environment in their BuddyBook.

To ensure the subject-themed room do not get overcrowded a system of passes was put in place. Those passes, that are used like entrance tickets to the different learning environments, are handed out in core group units. After their distribution pupils are accompanied by teachers to the subject-themed classrooms. To stay on top of things, the distribution of pupils to different learning environments is written down for everyone to see. Children with special educational needs are monitored and supported especially intensively in those independent learning units. Preconditions for learning of each child or youth are considered to facilitate individualised work on personal goals. Each classroom has a designated subject or range of content and an assigned colour (pictures below depict selected elements that characterize the specific room).

The Red Room: Pupils can work on German, History and Geography in this learning environment.

The Green Room: Pupils can work on Mathematics and Science in this learning environment.

The Yellow Room: Pupils can work on English and Creative Lessons/Art in this learning environment.

The Blue Room: Pupils can use this room as an additional environment for aspects of their individual work or to arrange specific environmental conditions for optimised learning.

Several smaller rooms are available for individual learning units as well as a quiet room on ground floor level to accommodate time-outs if needed.

II. Educational practices to reflect learning

Reflecting the learning process

The beforementioned aspects about the learning environment provide access to different ways of learning. External influences and approaches get covered by these guidelines. Regarding the choice about the learning environment, it is important to let the pupils try different options and come up with ideas how their learning process could improve. To know what is good for oneself, the children need to know about self-reflection. This is a part of the UDL guideline 9 to "Provide options for self-regulation". This guideline contains "promote expectations and beliefs that optimize motivation", "facilitate personal coping skills and strategies" and "develop self-assessment and reflection". To teach kids about these topics, which also represent a very important aspect in interpersonal relationships, different approaches get deployed. One way to reflect one's own learning process is for example the beforementioned documentation of their progress during the box lessons via the Protocol of Learning.

Tools for practicing self-regulation

The pupils start their day together as a class community. During these hours, the pupils and their teachers elaborate different social skills concerning social cohesion, learning habits and tools of reflection. One of these tools is the BuddyBook, written by Monika Perkhofer-Czapek, Renate Potzmann and Christa Schubert in 2018, a thin notebook for processing the topics of the week, what has been a success to the pupils or what they want to do better in the future on one double-pages per week.

The BuddyBook

The first pages of the BuddyBook give the pupils the opportunity to create their personal profile. They write their name, hobbies, personal traits and add what they do like or do not like about school.

The next pages continue with the reflecting process in the following way: they need to set their goals for the upcoming week and after this week they reflect together, which goals they have reached or what they might need for reaching them. There is space to write for the teachers and parents as well, to catch up with the learning process of the pupils and comment on it. The BuddyBook gets applied during the first two years to develop understanding of one's learning process. So, week per week they learn more about their own metacognition, which is an important tool for self-regulation. The BuddyBook not only contains tasks concerning the topics which are covered during the lessons but provide space for positive and negative experiences in the class community as well.

Figure 10: Cover of the BuddyBook. (Perkhofer-Czapek, Monika; Potzmann, Renate & Schubert, Christa (2018): Mein BuddyBook. Der individuelle Lernwegbegleiter. Wien: Bildungsverlag Lemberger).

The pupils get the possibility to write about struggles or how they achieved something together with their classmates. In that way, self- regulation is not only considered as the key for successful learning, but also for balanced relationships in class. At first, it might not seem easy to reflect about all these events occurring during an average school day. To support this process, the help of the teacher is necessary, to frame goals, talk about obstacles and developments. In the Schulzentrum Donaustadt, one hour per day is dedicated to discussing the BuddyBooks together in class. A trophy with sweets gets passed around and the pupils take one after talking about their personal progress. If there is enough time during the day, another option is to individually talk to the children about their notes.

My weekly preview from October 14 to 18	
Monday	*E-Check, workshop, E-plan*
Tuesday	*End of the lesson: 12:50*
Wednesday	*English*
Thursday	*Maths-Check submission*
Friday	*Open day*
Saturday	
Sunday	

My goals for this week		Achievement of goals			
		☹	😐	☺	😊
Goal 1	*do not call out unsolicited*		X		
Goal 2	*be quiet*		X		
Goal 3					

My weekly review	
This is what I have learned	*Questions in past tense*
This has been difficult for me	*Add up and subtract fractions*
This is what I want to do better	*Add up fractions*
This is what I am proud of	
That I'm finishing and accomplishing my plans	
Comments and notes from school	
Please try to keep order again and to take an active part in lessons, even if you don't feel like it or it is difficult.	
Comments and notes from home	
You are really working well on your work plan. Please concentrate better and always read the instructions before you're starting. Try to stop yourself from answering sometimes (if it's provoking)	

Table 10: Weekly preview and review based on the BuddyBook (Perkhofer-Czapek et al. 2018). The pupils can note their tasks for the week and their goals for the weekly preview. Then they can review the week: what has been difficult or easy for them, what they're proud about. On the bottom of the page is some space left for the parents and teachers to comment the pupil's process.

The subject "KoKoKo" (Communication, Cooperation and Conflict Counselling)

As the pupils talk about their different goals and how to approach them together in the class, they gain insight in their mates' focus and learn about diverse learning strategies and how to help each other out, which is an important topic during the KoKoKo-lessons. One lesson per week is dedicated to the subject "KoKoKo – Kommunikation, Kooperation und Konfliktberatung" (Communication, Cooperation and Conflict Counseling) in which the pupils gain knowledge about social skills. The content of these lessons connects with different aspects of the option to "facilitate personal coping skills and strategies" of the UDL Guideline 9.

Communication between pupils, parents and teachers

The exchange between the parents and teachers not only happens in the BuddyBooks – the "KEL-Gespräche – Kind-Eltern-Lehrer*innen-Gespräche" (Pupil-Parents-Teachers-Talks) are another strategy to reflect together as the social environment of the pupil about his or her learning process. The following two pages contain the form with questions which the teachers work through with the pupils and their parents.

Reflection questions for students' KEL – conversation

student's name: _____   **class:** _____

Questions focused on subject competence:

Which subjects at school do I like and why?

_____

_____

What are my special works/documents?

_____

_____

What am I really good at?

_____

_____

Where do I still need some help?

_____

_____

Questions focused on social competence:

What is great about our class and what do I do to make everyone love to come in our class?

_____

What stresses me? What do I not like about our class?

_____

How is my behaviour in class/during lessons?

_____

I would ask for some help from my teachers and/or parents at/with?

_____

_____

In which subject do I want to get better? Remarks:

_____

_____

Signature student   **Signature parents**   **Signature teacher**

Progress in the process

The goal of all these strategies for self-reflection is, to enable the pupils to control their own learning process. If a problem with, e.g., contributing to the topics during the lessons, comes up, the self-monitoring helps to recognize it. The teachers can help to find out, why that might be an issue and how they could solve this problem to improve the learning process of their pupils. Different steps may be encouraging shy students by telling them about their valuable contributions or writing notes and stick them to the pupil's desk for reminding them to bring in their ideas. But it is important to let the pupils evaluate their own success. To compare the individual steps during their learning process, it is helpful to let the pupils record and reflect them with their own words. Teachers can support this process by scaffolding, meaning to help their pupils fulfilling the necessary steps or finding words to describe certain feelings or circumstances.

Figure 11: Pupils working together in class.

List of Figures

The pictures used to protect the children's and teachers' identities are provided by
www.pixabay.com.

Additional Resources

http://udloncampus.cast.org/page/udl_examples

https://www.collegestar.org/universal-design-for-learning: College STAR (Supporting Transition Access and Retention) is a project which helps campuses to become mor inclusive. The category "Instructional Support" on their homepage lists methods and videos about UDL.

https://thinkudl.org/: a podcast about UDL "where we hear from the people who are designing and implementing strategies in post-secondary settings with learner variability in mind"; Additional resources and a transcript for each episode are provided as well.

https://www.understood.org/en/school-learning/for-educators/universal-design-for-learning/lesson-planning-with-universal-design-for-learning-udl : This page guides step by step through planning an UDL-lesson. It also provides a free template for UDL lesson planning.

https://www.thinglink.com/scene/830135641269338112?buttonSource=viewLimits: Free Technology Toolkit for UDL in All Classrooms

https://www.youtube.com/watch?v=PQSAQdxnQBY&ab_channel=YourAlberta: video-introduction to UDL and its principles

https://www.youtube.com/watch?v=B7qYJY62X2s&list=PLLKd3h8UX_F_f0XT9ze59-yI6gOv_obIj&index=20&ab_channel=Understood: video of teacher Eric Crouch explaining and showing how he applies UDL in his classroom.

https://www.youtube.com/c/UdlcenterOrg/videos: Youtube-account of the National Center on UDL, with different videos of UDL-lessons.

https://www.ahead.ie/udl: Explanations and additional resources concerning UDL from AHEAD – an independent non-profit organisation working to create inclusive environments.

https://www.advocacyinstitute.org/resources/ParentUDLGuide.pdf: Parent's Guide for UDL from the National Center for Learning Disabilities.