

MODULE 3

LEARNER-CENTERED PRIMARY EDUCATION: ENHANCING CO-CREATED LEARNING PROCESSES

3.3 SELF-DETERMINATION, EMPOWERMENT AND SELF-EFFICACY

Learner-Centered Primary Education: Enhancing Co-Created Learning Processes. Self-Determination, Empowerment and Self-Efficacy.

This OER was developed by the Contemporary Teaching Skills for South Asia/CONTESSA Consortium co-funded by the Erasmus+ Programme of the European Union under the project number 598756-EPP-1-2018-1-AT-EPPKA2-CBHE-JP-/CONTESSA.

Date of publication: 2021

Published by: CONTESSA

Output Coordinator:

University of Graz (AT): Sandra Hummel, Mirjam Brodacz-Geier

With contributions from:

University of Graz (AT): Bridget Sheehan, Sandra Hummel, Mana-Teresa Donner, Mirjam Brodacz-Geier

University of Cambodia (CM): Angus Munro, Siem Or

University of Colombo (SR): Chinthaka Chandrakumara, E. Randeniya, Udeshinie Perera

Disclaimer: The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein. It is openly and freely available on the CONTESSA website together with further details: <https://contessa-project.eu/>

Copyright: This document is licensed under the terms of the Creative Commons Attribution-ShareAlike 4.0 International License (<https://creativecommons.org/licenses/by-sa/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made. If you remix, adapt, or build upon the material, you must license the modified material under identical terms. The images, audio and video material as well as any third-party material in this document are not included in the document's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the document's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.



Introduction

What is the CONTESSA course?

The CONTESSA course is one of the results of the “Contemporary Teaching Skills for South Asia” project co-funded by the Erasmus+ Program of the European Union. Its aim is to be a contribution to establishing successful teacher education programs for primary teachers, particularly in Cambodia and Sri Lanka, which will create a long-lasting positive impact on the overall educational systems.

It is increasingly important for successful educators to stay up-to-date with contemporary skills and methods to use inside and outside of the classroom. The CONTESSA course therefore offers five carefully selected modules, each of which contain three focuses aimed at the development of contemporary teaching skills. The modules and their focuses are as follows:

Module 1. Building Blocks of Primary Education

1. Twenty-First Century Teaching and Learning
2. Lesson Planning and Methodological Skills: Concepts, Tools and Application
3. Designing Learning Environments

Module 2. Excellence in Teaching: Profession-Specific Competences of Primary School Teachers

1. Teaching Comprehension: Roles, Tasks and Functions
2. Assessing Learning Results
3. Pedagogical Professionalization

Module 3: Learner-Centered Primary Education: Enhancing Co-Created Learning Processes

1. Individual Development and Problem-Solving Skills
2. Lifeworld-References and Future Prospect
3. Self-Determination, Empowerment and Self-Efficacy

Module 4: Embracing the Differences: Pedagogic Approaches to Diversity, Heterogeneity, Special Needs

1. Inclusive Pedagogy: Approaches and Strategies
2. Teaching and Learning in Diversity: Preparation, Realization, Assessment
3. Diversity-Sensitive Classroom Management

Module 5: Digital Teaching and Learning

1. E-Pedagogy and Digitally Enhanced Learning Environments
2. Digital Media and Technology: Tools and Formats for Educational Purposes
3. Online-Based Lesson Preparation and Conduction

Upon completion of this course, participants will be able to implement newly acquired contemporary teaching skills, engage all students in classroom activities and learn new ways to help students reach their full potential.

Who is the CONTESSA course for?

The “Contemporary Teaching Skills for South Asia” project aims at promoting contemporary teaching skills for pre-service and in-service teachers working in primary schools. The following document is specifically adapted for pre-service teachers.

Furthermore, the CONTESSA course is available for anyone interested in staying up-to-date with contemporary teaching skills.

This is the English version of the CONTESSA course. Material is also available in Khmer, Sinhala and Tamil.

What is the structure of the CONTESSA course?

As mentioned before, the CONTESSA course consists of five modules, each worth the equivalent of 3 ECTS. Ideally, the modules are all used together since individual modules refer to other modules, but they are also designed in a way that each one can be used on its own.

Each module contains three thematic focuses and documents are available for each focus. This makes a total of 15 documents available in the CONTESSA course. Each document contains a theoretical introduction to the focus, followed by practice exercises based on the theory. **STEP 1 – THEORY** – is meant as a revision of what has been read in the theoretical introduction. Practice exercises check the comprehension of the text to make sure that the underlying theory has been understood. **STEP 2 – EXPERIENCE** – offers examples of real teachers and how they practically implement the theory explained in the theoretical introduction. These examples are again connected to practice exercises which are meant to allow for the application of the previously learned theoretical knowledge. **STEP 3 – (SELF-)REFLECTION** – includes reflection questions based on each focus. **STEP 4 – PRACTICE** – is the final STEP where a teaching project is created based on what has been seen before in STEPs 1 and 2.

The practice exercises in STEPs 1 and 2 can be directly completed in this document. STEPs 3 and 4 are part of a separate portfolio document which has to be created by each individual. A template for this portfolio is available as a separate document.

TABLE OF CONTENTS

1	Role of the Teacher in Developing Empowered Students	1
2	How Teachers Empower Students.....	4
2.1	Building Trust by Sharing Power	5
2.2	Utilizing Problem-Based Learning	7
2.3	Embracing Collaborative Learning.....	11
3	Key Points.....	16
4	References.....	17
4.1	Additional Literature	19
	STEP 1 PRACTICE EXERCISES	20
	STEP 1 PRACTICE EXERCISES - SOLUTIONS	24
	STEP 2 PRACTICE EXERCISES	28
	STEP 2 PRACTICE EXERCISES - SOLUTIONS	31
	STEP 3 PORTFOLIO TASK – SELF-REFLECTION QUESTIONS.....	34
	STEP 4 PORTFOLIO TASK – TEACHING PROJECT	34

1 ROLE OF THE TEACHER IN DEVELOPING EMPOWERED STUDENTS

The changing demands and expectations of the twenty-first century have required a major reappraisal of educational practice. Traditional top-down (teacher-led) approaches with the teacher as the ‘expert’ and the students as passive listeners are now generally recognised to be inadequate for the preparation of upcoming generations. Today’s students are entering a socio-economic environment which requires increasing flexibility and adaptability and the capacity for life-long learning (Murdoch & Wilson, 2008).

This shift to **learner-centered teaching** environments means that the teacher is no longer the ‘expert’ but rather a supportive guide or facilitator for their students. There is the need for a less hierarchical, more democratic learning environment with teachers helping students get in touch with who they want to be and what they want to accomplish in the world. This requires a change in both the mind-set and the skill-set of teachers and students. Students should become less dependent on their teachers and more independent as individuals whilst being open to inputs not only from their teachers but also from their classmates and others (Chu, Reynolds, Tavares, Notari, & Lee, 2017).

To facilitate this shift, teachers should aim to serve as catalysts to empower their students by bringing out their creativity and by making learning an attractive challenge, rather than a requirement (Chu et al., 2017). It is important to note that this is not an excuse for teachers to shift responsibility and expect their students to teach themselves. Instead, there is the basic expectation that teachers remain actively involved in helping their students but with a paradigm shift from ‘How do we teach?’ to ‘How can we help them learn?’

Learner-centered teaching refers to forms of instruction that [...] give students opportunities to lead learning activities [...] and generally contribute to the design of their own course of study. (The Glossary of Education Reform, 2014, online)

Central to the effective implementation of this shift to empowered students is the need for concrete and practical steps for teachers to help students on the path to empowerment and self efficacy. Teachers are tasked with cultivating learning environments in which power is shared and students' self-efficacy is encouraged.

If our students are to be successful, they will need to find work that is as satisfying to the human spirit as it is satisfying economically. As teachers, we need to design learning experiences that help students get in touch with who they want to be and what they want to accomplish in the world. We must include opportunities for all students to build social capital and develop a voice for interaction with people in power positions. They must learn how to create and use professional networks and develop and promote their innovative ideas. (Kallick & Zmuda, 2017, p. 1)

To begin cultivating these types of learning environments, UNESCO & UNODC (2019) state their overall framework for empowering young students to “engage and assume active roles, both locally and globally, as proactive contributors to a more just, peaceful, tolerant, inclusive, secure and sustainable world” (p. 14). Their framework covers three domains that overlap, reinforce and build upon one another on a student's path to becoming empowered. Teachers are responsible for progressively developing the skills, values, knowledge and attitudes across the three domains.

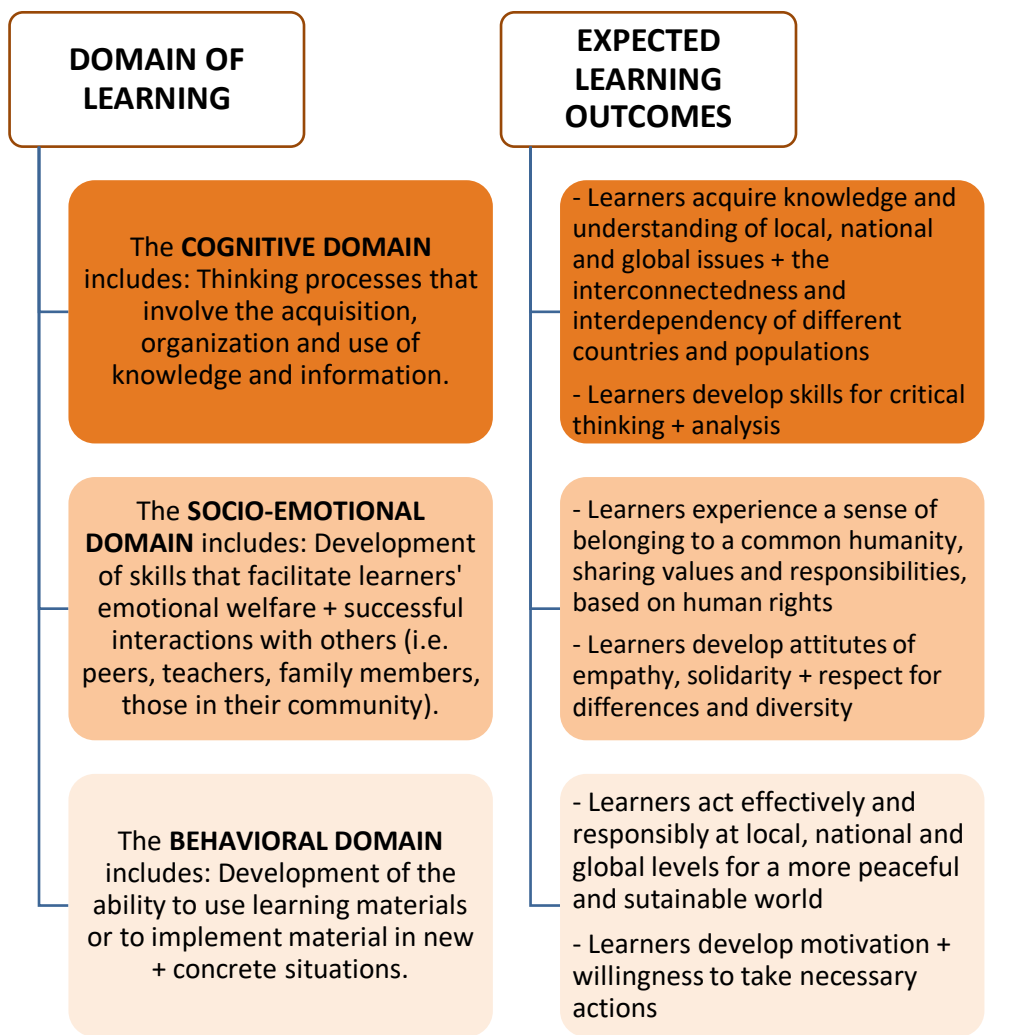


Figure 1: The Global Citizenship Education Domain of Learning¹

With the same goal of empowerment in mind, Chu et al. (2017) summarize three major categories of skill sets and related components that teachers should be aware of. The first of these, Learning and Innovation, represents the major components associated with traditional teaching and includes critical thinking, communication skills and creativity. The second, Digital Literacy, reflects the increasing importance of information technology (IT) and information literacy skills, with the need to keep up with ever more

¹ Adapted from UNESCO & UNODC (2019, p. 14). CC BY-SA 3.0.

complex ways of finding, evaluating, managing, manipulating and sharing data and other information. The third, Life and Career Skills, reflects the need for greater flexibility, initiative, leadership and accountability of individuals as a result of the socio-economic changes arising from globalization.

Chu et al. (2017) also present such conclusions from a different perspective called a ‘Formula for Twenty-First Century Learning’. Apart from the continuing importance of ‘the 3 Rs’ (reading, writing, and arithmetic) an additional seven fundamental sets of skills are listed (see also Trilling & Fadel, 2009):

- Critical thinking and problem-solving
- Creativity and innovation
- Collaboration, teamwork and leadership
- Cross-cultural understanding
- Communication and media fluency
- Computing and ICT fluency
- Career and learning self-reliance

In order for students to become proficient in the skills outlined above, they must have opportunities to engage in meaningful activities delivered through a variety of diverse teaching and learning methods. The following section will elaborate on the different practical methods for teachers to implement in the classroom to pave the way for empowerment.

2 HOW TEACHERS EMPOWER STUDENTS

In order to establish the class as an empowered learning community, there is the need for a more democratic relationship between the teacher and all of the members of the class. The goals of the class as a whole and its individual members should be discussed during the first few meetings, together with any rules, to give a greater feeling of ownership. The need for respect of the

ideas and opinions of others should be emphasized so as to encourage the participation of all in class activities: such open mindedness will encourage students' risk-taking in offering ideas and suggestions. In this way, a feeling of mutual trust will be fostered: thus discipline should be fair and positive, showing respect for the students involved. The ultimate aim should be to create an engaging learning environment, to build the self-esteem of each member of the class and thus encourage the development of an empowered team spirit.

Each student has their own preferred way of receiving and processing information to develop an understanding and retention of a particular topic. Moreover, this will be influenced by their backgrounds and particular interests: relevance will serve to better emotionally engage learning. Accordingly, students will become better learners through developing an understanding of how they learn: what strategies they find to be the most suitable. This can be done, for example, as part of self-assessment exercises where students review what they have learned and set their own goals for how to proceed further. In this way, with the guidance of their teacher, they can develop and diversify their thinking skills based on the recognition of their particular strengths and areas which need to be developed further (Murdoch & Wilson, 2008).

2.1 Building Trust by Sharing Power

Teacher-student relationships are extremely important to positive student outcomes. Students who trust their teachers are more satisfied at school, have high engagement levels, display positive behaviors and demonstrate the characteristics of empowered students. Teachers who share power with their students and allow their students to see them as 'human' are successful in creating environments where students can thrive. Equity in the classroom is central to building trust (Kirk, Lewis, Brown, Karibo, & Park, 2016).

In traditional classrooms, students have little choice in the major decisions made about their education (e.g., course content, pace, structure, condition, assessment and important decisions), making them feel disempowered. Teachers should become facilitators of learning rather than leaders. When students have more power over what and how they are learning, they become more confident and realize the power of the learning community they are in, a community that thrives on “communication, interaction, co-construction of knowledge and most importantly, respect” (University of Utah, n.d., online). Ultimately, the less power teachers share, the more dependent students become.

Teachers who share power and build trust are called **autonomy** supportive teachers. One practical measure autonomy supportive teachers take is the use of language that is informational and non-controlling. Table 1 highlights the difference between autonomy supportive and controlling behaviors.

Table 1: Autonomy Supportive and Controlling Behaviors²

BEHAVIOR	Autonomy Supportive	Controlling
Teacher Feedback	“You wrote an engaging story with good structure.”	“You completed the exercise as you were told.”
Student Choice	The students can choose their groups and the order of the tasks.	The teacher chooses the groups and order of the tasks.
Teacher Symbols	The teacher corrects an assignment with a green or blue pen.	The teacher always corrects with a red pen.
Language	“You could...” or “If you’d like...”	“You must...” or “You need to...”
Grades	Students are assessed in various ways throughout the year.	Students are assessed with a number grade on every assignment.
Organization	Students can choose how much time they spend on certain tasks within a given amount of time.	Students have to finish the tasks when the teacher tells them to.

Autonomy is a form of voluntary action, stemming from a person’s interest and with no external pressure. Social environments that support autonomy provide meaningful rationale, acknowledge negative feelings, use noncontrolling language, offer meaningful choices, and nurture internal motivational resources. In classrooms where teachers support autonomy, students improve their academic performance, are

² Adapted from Hofferber, Eckes, & Wilde (2014, p. 179).

2.2 Utilizing Problem-Based Learning

Problem-based learning (PBL) is a teaching method in which students are asked to solve real-world problems as a vehicle for them to understand larger concepts and principles. PBL is a type of inquiry-based learning which tends to be more long-term and interdisciplinary, often with no definitive answers at the end as a result of the various ways that a diversity of information can be gathered and thereafter compiled and analyzed: inquiries by different individuals mean that different sources and interpretations of their findings are evaluated so that there is no standard output. Seeing the ‘big picture’ is facilitated by inquiry-based learning, more especially when the assignments have immediate relevance to the students (Murdoch & Wilson, 2008).

Problems can come from a variety of sources, making students aware of local or global issues which directly affect their and others’ lives and in all probability their futures. It can be enhanced by the use of local issues and relevant examples to better engage the students, including them as future active citizens. In this way, schools can be part of a wider community, including and actively involving parents and other stakeholders. Moreover, engagement of the students and the local community can be further enhanced if this also involves planning and organizing activities such as fundraising or volunteering for deserving causes. Extra-curricular contributions to these and to organizing school events can be recognized by participating students receiving awards (Murdoch & Wilson, 2008). This may comprise short-term assignments in class or as homework or may be more extensive, being ongoing for much of the term. These may be individual or group-centred and proposed by the student(s) involved, based on the ‘passive’ guidance of their teacher/facilitator as appropriate (Chu et al., 2017) or based on a topic suggested by the instructor where the students are required to develop the theme themselves (Krauss & Boss, 2013).

more creative and better adjusted, engage more in school, and feel less stress. (Núñez & León, 2015, p. 275)

Problem-based learning (PBL) is an instructional method aimed at preparing students for real-world settings. By requiring students to solve problems, PBL enhances students’ learning outcomes by promoting their abilities and skills in applying knowledge, solving problems, practicing higher order thinking, and self-directing their own learning. (Jonassen & Hung, 2012, online).

PBL thus differs from thematic teaching, which is instructor-centred: the teacher selects an appropriate topic and the activities which the students are expected to do over the course of the exercise (Krauss & Boss, 2013). As shown in table 2, the focus of PBL is on developing and reinforcing many skills in parallel (Krauss & Boss, 2013; Chu et al., 2017). It provides an effective means for students to not only develop their own ideas but also to use various tools to search for relevant material; and thereafter to compile and edit it (Chu et al., 2017). This thereby enhances their information literacy.

Table 2: Key Learning Areas and Their Skills³

Key Learning Areas	Skills
Curriculum content	Gaining knowledge, interpreting, and synthesizing
Information literacy	Locating, evaluating, and using information
Learning how to learn	Initiating, selecting, exploring, focusing, collecting, presenting, and reflecting
Literacy competence	Reading, writing, speaking, listening, and viewing
Social skills	Cooperating, collaborating, flexibility, and persistence

Krauss and Boss (2013) note that PBL requires that projects be:

- relevant, meaningful to the students themselves; as well as
- rigorous (e.g., not being easily resolved by a superficial Google search).

Well-designed projects can have life-long impacts on those involved. Strategies for designing constructive approaches to this style of teaching form the basis for table 3.

³ Adapted from Chu et al. (2017).

Table 3: Project-Based Learning⁴

Skill	Implication for Students	Application in PBL
Flexibility	Students can adapt and improvise.	Design open ended projects with more than one solution.
Organization	Students can apply a systematic approach to reach a goal.	Provide students with tools to manage their project (e.g., shared calendars, planning templates).
Self-control	Students can control their impulses.	Model respectful behavior and establish respectful protocols.
Task Initiation	Students can begin a task without procrastinating.	Ask students to track their goals and progress in journals or on blogs.
Time Management	Students can manage multiple deadlines and demands and plan ahead.	Establish interim milestones that work towards the final product.
Metacognition	Students can reflect on the quality of their work and their own thought processes.	Frequently ask students to reflect on their progress.

Based on the abovementioned suggestions, table 4 lists various ideas for PBL exercises.

Table 4: Ideas for PB⁵

PBL Activity	Make it happen by...
Storytelling	Create a corner of your classroom that invites storytelling <i>Ask yourself: What inexpensive materials could you use to designate this space?</i>
Field research	Recruit parent volunteers to help with transportation, supervision of students; Use tools like Skype to connect students with remote experts

⁴ Adapted from Krauss & Boss (2013, p. 18).

⁵ Adapted from Krauss & Boss (2013, p. 34).

	<i>Ask yourself: What processes (such as having permission slips on file or ongoing connections with local experts) would help eliminate barriers for field research?</i>
Sharing work with authentic audiences	Have a guest book for visitors to sign; Curate exhibits with ‘artist’ statements; Have students greet and guide visitors <i>Ask yourself: How could you use publishing to reach a larger audience for student work?</i>
Down time (allowing students to recharge their ‘thinking batteries’ after periods of focused work)	Give students more flexibility over how they use class time <i>Ask yourself: How might you incorporate short periods of physical activity during class time?</i>
‘Mash-ups’ among students that allow for informal exchange of ideas	Mix up team assignments from one project to the next <i>Ask yourself: How transparent is your process for making team assignments?</i>
Scenario-based projects or simulations that put students into immersive environments	Incorporate gaming and other immersive environments (both digital and nondigital) into projects <i>Ask yourself: Who could teach you more about immersive environments?</i>
Building prototypes and models	Provide students with raw materials to make models and prototypes, making their thinking visible <i>Ask yourself: Where could you create a space for creating models and prototypes within your school building?</i>

When engaging in PBL, students’ knowledge and understanding of relevant information-seeking concepts and principles should be periodically monitored to identify any problems and provide advice as necessary. Monitoring the development of individual students’ **metacognitive skills** will help teachers to keep track of individual students’ progress and adjust their approach as facilitators to better meet the needs of each individual. Evaluating the success of the project is also important. Self-evaluation and peer evaluation are common methods in PBL.

Metacognitive skills are strategies applied consciously or automatically during learning, cognitive activity, and communication to manipulate

2.3 Embracing Collaborative Learning

Collaboration is a powerful facilitator of learning because students feel connected and like part of a community when they work effectively with others. Even though collaborative learning seems similar to project-based and cooperative learning, there are some differences. Project-based learning gives students the opportunity to learn through real or simulated situations. The students work in teams, get new knowledge through practice, exchange experiences and develop their skills. In cooperative learning models, the students work and learn together in small groups on given tasks. In collaborative learning approaches, students also work together via peer interactions but also with the participation of the teacher. (Arama, 2019; Elbers & Streefland, 2000) Collaborative learning lets students decide on how they structure the peer-interactions and learning, whereas in cooperative learning the teacher designs and takes control over the learning structure from the beginning to the end (Iglesias Rodriguez, Garcia Riaza, & Cruz Sanchez Gomez, 2017).

Five basic aspects represent collaborative learning:

- **Positive interdependence:** All members of a group have to work together if they want to reach the final goal of a task. Therefore, they are connected to each other and if one member cannot achieve his or her part of the task, every other member of the group will have to face the same consequences.
- **Relevant interaction:** Collaborative learning is a process where the group members give feedback to each other, share and explain subject related things and question the conclusions and reasons of the others.
- **Personal responsibility:** All students of a group are responsible for the success, how they split the work between each other and the chosen material for the task.
- **Social skills:** The right set up of a collaborative learning environment helps students to develop and improve skills like leadership,

cognitive processes before, during, or after a cognitive activity. Examples are executive function processes such as verbal mediation, self-regulation, planning, judgment, and self-monitoring. (Patterson, 2011, online)

communication, decision-making, trust-building and conflict management.

- Group self-evaluating: The whole team declares milestones and decides what is going well and where they have to change or improve something. (Iglesias Rodriguez et al., 2017)

Collaborative learning requires engaged students who are able to use previous knowledge and connect it with new material. This does not mean that lecturing, listening and note-taking will vanish from class, but they will have a minor role beside students' discussion and active work. The role of the teacher switches from a simple expert who shares his or her knowledge to a facilitator who is responsible for designing experiences where the students are able to learn new things and anchor existing knowledge.

In the primary classroom, students of a young age who do not have experience with collaboration need guidance at the beginning. Therefore, teachers should establish norms or agreements with the groups. That way it is possible to give the children a voice from the start and ensure that the ideas of everyone are important. Table 5 shows the seven norms of collaboration, which can be modified in an age-appropriate way.

Table 5: Collaborative Norms⁶

Collaborative Norm	Explanation	Example for the Classroom
Promoting a Spirit of Inquiry	Helps students seek first to understand	Encourage students to ensure they fully understand what their classmates are saying: "Tell me more about..."
Pausing	Allows time for thinking and enhances dialogue, discussion, and decision-making	Use reflective writing or journaling at specific points during the group work, remind group members to pause before solving a problem right away, and ask students to 'take a moment to think about it.'

⁶ Adapted from Garmston & Wellman (2016).

Paraphrasing	Allows students to hear and understand one another	Encourage students to use phrases such as: “It sounds like you are saying...” or “So, to sum up what you said...”
Probing	Increases clarity and precision of a student’s thinking	Probing should be gentle and open-ended: “I would like to hear more about...” or “I am interested in hearing...”
Putting Ideas on the Table	Creates meaningful dialogue	Contributing ideas should be encouraged and students should remain open-minded: “One thought I have is...” or “Here is an idea...”
Paying Attention to Self and Others	Help students stay aware of how their words and actions affect the group	Educate students on group norms (e.g., group members who speak too often or not enough) so that they become aware of them and act accordingly. Students can ask themselves: “How am I feeling?” “How are others reacting to what I am saying?”
Presuming Positive Intentions	Promotes productive dialogue and eliminates unintentional resentment	Tell students it is OK if they disagree with one another, but they should respond positively and without judgement: “I understand that is your opinion, however...”

A poster with the seven norms of collaboration could be made by the class and hung on the wall to remind students how to use them. Teachers can ask students to create their own prompts much like the poster in figure 2.

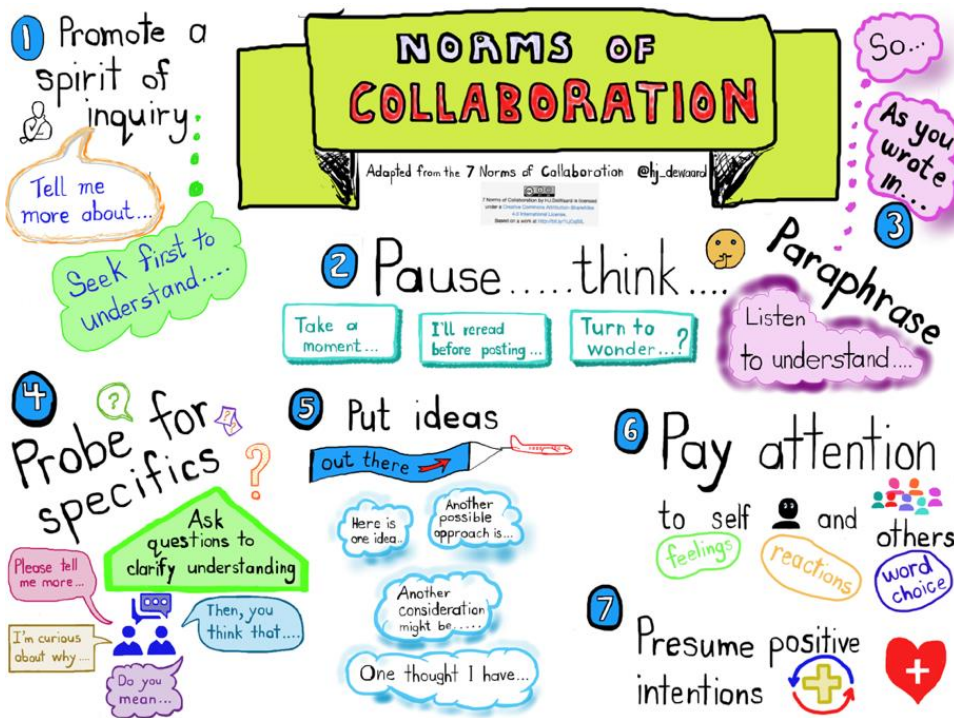


Figure 2: Norms of Collaboration Poster⁷

Another important aspect to teach students good collaboration is to show them how to listen. One way could be the ‘three, then me’ norm. This means that after a statement, the student has to wait for three others before he or she can speak again (Alber, 2017). An alternative would be the strategy ‘save the last word for me’:

- The teacher chooses a text (images or questions are also possible).
- The students have to read the text and highlight, for example, three sentences that stood out for them.
- Each chosen sentence has to be written on the front of a card or paper or electronic device (if available). The important thing is that the students are taking notes and thinking about the task. The reason why they chose those sentences (e.g., what it means to them or reminds them of) has to be written on the back of the cards or on another site in the writing document.

⁷ Taken from DeWaard (2019, online). CC BY-SA 4.0.

- The students are divided into groups of three by the teacher and are labelled (e.g.) student A, B, and C.
- In groups, beginning with student A, one person reads one of the quotations to their group and the other two discuss it: What does it mean? Why is it important to the reader?
- After a few minutes, all A students are invited to read the back of their cards and explain their choice. That way they have ‘the last word’. Now, the first round is complete, and the groups go on with the next student B and then C.

(Facing History and Ourselves, n.d.)

Negotiation is an additional skill important for collaboration. This includes listening well, showing patience and flexibility, pointing out shared ideas and areas of group agreement and thinking under pressure. One possible training task is dividing the class into groups and letting each group build a consensus on a topic like planning a birthday party, a field trip or a group meal (Promethean, 2017a).

Through collaboration and the guidance of the teacher, students improve their autonomous learning and confidence, they recognize the importance of listening and sharing and they also begin to notice that everyone brings special skills and therefore value into a project (Promethean, 2017b). Collaboration is not only about the preparation of students but also about preparing the classroom, the teacher and the school. The classroom should be prepared for whole class teaching, group work and at the same time for independent work.

3 KEY POINTS

- ✓ There is a need for a less hierarchical, more democratic learning environment with teachers helping students get in touch with who they want to be and what they want to accomplish in the world.
- ✓ There is the basic expectation that teachers remain actively involved in helping their students but with a paradigm shift from ‘How do we teach?’ to ‘How can we help them learn?’
- ✓ To facilitate this shift, teachers should aim to serve as catalysts to empower their students by bringing out their creativity and by making learning an attractive challenge, rather than a requirement.
- ✓ Teachers should become facilitators of learning rather than leaders. When students have more power over what and how they are learning, they become more confident and realize the power of the learning community they are in.
- ✓ Teachers who share power and build trust are called autonomy supportive teachers. One practical measure autonomy supportive teachers take is to use language that is informational and non-controlling.
- ✓ Problem-based learning (PBL) should be used to ask students to solve real-world problems as a vehicle for them to understand larger concepts and principles.
- ✓ When engaging in PBL, students’ knowledge and understanding of relevant information-seeking concepts and principles should be periodically monitored to identify any problems and provide advice as necessary.
- ✓ Teachers should utilize collaborative learning approaches, in which students work together via peer interactions with the participation of the teacher.

- ✓ Five basic aspects represent collaborative learning: positive interdependence, relevant interaction, personal responsibility, social skills and group self-evaluating.
- ✓ In the primary classroom, students of a young age who do not have experience with collaboration need guidance at the beginning. Therefore, teachers should establish norms or agreements with the groups. That way it is possible to give the children a voice from the start and ensure that the ideas of everyone are important.

4 REFERENCES

- Alber, R. (2017). *Deeper Learning: A Collaborative Classroom is Key*. Retrieved from: <https://www.edutopia.org/blog/deeper-learning-collaboration-key-rebecca-alber> [2021, Mar. 31]
- Arama, A. (2019). Innovation of Teaching and Learning Practices through Online Collaborative Projects. *Conference Proceedings of eLearning and Software for Education (eLSE)*, 15, 171-177.
- Chu, S.K.W., Reynolds, R.B., Tavares, N.J., Notari, M., & Lee, C.W.Y. (2017). *21st Century Skills Development Through Inquiry-Based Learning: From Theory to Practice*. Singapore: Springer.
- DeWaard, H. (2019). *Norms of Collaboration*. Retrieved from: <https://www.3910cdl.hjdewaard.ca/blog/home/about/common-ground/norms-of-collaboration/> [2021, May 24]. Licensed under the terms of the Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>)
- Elbers, E. & Streefland, L. (2000). Collaborative Learning and the Construction of Common Knowledge. *European Journal of Psychology of Education*, 15(4), 479-490.
- Facing History and Ourselves (n.d.). *Save the Last Word for Me*. Retrieved from: www.facinghistory.org/resource-library/teaching-strategies/save-the-last-word-me [2021, Mar. 31].
- Garmston, R.J. & Wellman, B.M. (2016). *The Adaptive School: A Sourcebook for Developing Collaborative Groups*. Lanham, MD: Rowman and Littlefield.

- Hofferber, N., Eckes, A., & Wilde, M. (2014). Effects of Autonomy Supportive vs. Controlling Teachers' Behavior on Students' Achievements. *European Journal of Educational Research*, 3(4), 177–184.
- Iglesias Rodriguez, A., Garcia Riaza, B., & Cruz Sanchez Gomez, M. (2017). Collaborative Learning and Mobile Devices: An Educational Experience in Primary Education. *Computers in Human Behavior*, 72, 664-677.
- Jonassen, D.H. & Hung, W. (2012). Problem-Based Learning. In N.M. Seel, ed. *Encyclopedia of the Sciences of Learning*. Boston, MA: Springer.
- Kallick, B. & Zmuda, A. (2017). *Students at the Center: Personalized Learning with Habits of Mind*. Alexandria, VA: ASCD.
- Kirk, C.M., Lewis, R.K., Brown, K., Karibo, B., & Park, E. (2016). The Power of Student Empowerment: Measuring Classroom Predictors and Individual Indicators. *The Journal of Educational Research*, 109(6), 589-595.
- Krauss, J. & Boss, S. (2013). *Thinking Through Project-Based Learning: Guiding Deeper Inquiry*. Thousand Oaks, CA: Corwin.
- Murdoch, K. & Wilson, J. (2008). *Creating a Learner-Centred Primary Classroom: Learner-Centered Strategic Teaching*. Routledge.
- Núñez, J. & León, J. (2015). Autonomy Support in the Classroom: A Review from Self-Determination Theory. *European Psychologist*, 20(4), 275-283.
- Patterson, J. (2011). Metacognitive Skills. In: J.S. Kreutzer, J. DeLuca, B. Caplan, eds. *Encyclopedia of Clinical Neuropsychology*. New York, NY: Springer.
- Promethean (2017a). *Collaborative Learning in Primary Schools*. Retrieved from: <https://resourced.prometheanworld.com/collaborative-learning-primary-schools/> [2021, Mar. 31].
- Promethean (2017b). *Collaborative Learning: How Can It Help Your Students?* Retrieved from: <https://resourced.prometheanworld.com/collaborative-learning-students/> [2021, Mar. 31].
- The Glossary of Education Reform (2014, May 7). *Student-Centered Learning*. Retrieved from: <https://www.edglossary.org/student-centered-learning/> [2020, Apr. 27].

Trilling, B. & Fadel, C. (2009). *21st Century Skills: Learning for Life in Our Times*. San Francisco, CA: Jossey-Bass.

UNESCO & UNODC. (2019). *Empowering Students for Just Societies: A Handbook for Primary School Teachers*. Paris (UNESCO) and Vienna (UNODC). Retrieved from:
<https://unesdoc.unesco.org/ark:/48223/pf0000370902>. [2021, May 24].
This publication is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license
(<http://creativecommons.org/licenses/by-sa/3.0/igo/>).

University of Utah. (n.d.). *Sharing Power in the Classroom*. Retrieved from: <https://utah.instructure.com/courses/148446/pages/sharing-power-in-the-classroom> [2021, Mar. 31].

4.1 Additional Literature

Flaherty, A. (2018). Power and Empowerment in Schools. In: Y. Weinberger & Z. Libman, *Contemporary Pedagogies in Teacher Education and Development* (pp. 23-36). This publication is available in Open Access under the Attribution-ShareAlike 3.0 Unported (CC BY 3.0) <https://creativecommons.org/licenses/by/3.0/>

Fullan, M. & Langworthy, M. (2014). *A Rich Seam: How New Pedagogies Find Deep Learning*. London: Pearson. This publication is available in Open Access under the Attribution-ShareAlike 3.0 Unported (CC BY 3.0) <https://creativecommons.org/licenses/by/3.0/>

STEP 1 PRACTICE EXERCISES



A Indicate if the following statements are true or false:

1. The current shift to learner-centered teaching environments means that the teacher is considered the 'expert.' (T/F)
2. Ultimately, the less power teachers share, the more dependent students become. (T/F)
3. In classrooms where teachers support autonomy, students improve their academic performance, are more creative and better adjusted, engage more in school, and feel less stress. (T/F)
4. Collaborative learning does not let students decide on how they structure their peer-interactions and learning; the teacher decides. (T/F)
5. Problem-based learning is a type of inquiry-based learning which tends to be more long-term and interdisciplinary, often with no definitive answers at the end. (T/F)
6. Executive function processes such as verbal mediation, self-regulation, planning, judgment, and self-monitoring are all examples of metacognitive skills. (T/F)
7. The focus of problem-based learning is on developing and reinforcing one skill at a time. (T/F)
8. Listening is an important skill in collaborative work. (T/F)



B Fill in the domain for each expected learning outcome according to UNESCO's framework for empowering students:

cognitive – socio-emotional – behavioral

_____ Students acquire knowledge and understanding of local, national and global issues

_____ Students develop the motivation and willingness to take necessary actions

_____ Students develop critical thinking and analysis skills

_____ Students experience a sense of belonging to a common humanity, sharing values and responsibilities based on human rights

_____ Students acquire knowledge and understanding of the interconnectedness and interdependency of various countries and populations

_____ Students develop attitudes of empathy, solidarity and respect for differences and diversity

_____ Students act effectively and responsibly at local, national and global levels for a more sustainable and peaceful world



C Complete the chart by filling in the missing pieces:

Teacher Symbols¹ – “You must...” or “You need to...”² – Students are assessed with a number grade on every assignment³ – Organization⁴ – The students can choose their groups and the order of the tasks⁵ – “You could...” or “Maybe you try...”⁶ – Teacher Feedback⁷

BEHAVIOR	Autonomy Supportive	Controlling
	“You wrote an engaging story with good structure.”	“You completed the exercise as you were told.”
Student Choice		The teacher chooses the groups and order of the tasks.
	The teacher corrects an assignment with a green or blue pen.	The teacher corrects with a red pen.
Language		
Grades	Students are assessed in various ways throughout the year.	
	Students can choose how much time they spend on certain tasks within a given amount of time.	Students have to finish the tasks when the teacher tells them to.



D Drag and drop the characteristics into the appropriate category in the chart below:

learn through real or simulated situations¹ – positive interdependence² – develop and improve communication, trust-building and leadership³ – teacher designs the learning structure⁴ – teachers are facilitators⁵ – there is no standard output⁶ – students work together in small groups on given tasks⁷ – the learning is more long-term and interdisciplinary⁸ – all group members are responsible for the success⁹ – the tasks are meaningful to the students themselves¹⁰ – the teacher takes control over the learning structure¹¹ – the whole team decides what is going good and where they have to change or improve something¹²

collaborative learning	problem-based learning	cooperative learning



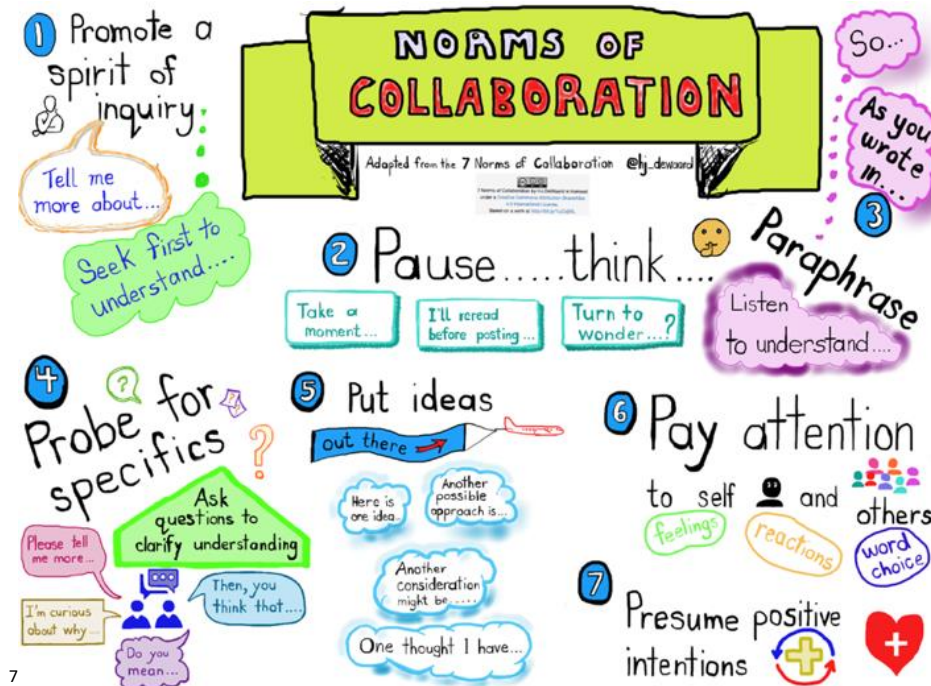
E Match the skills (1-6) with the application of problem-based learning (A-F).

1. Flexibility
2. Organization
3. Self-control
4. Task Initiation
5. Time Management
6. Metacognition

- A. Provide students with tools to manage their project.
- B. Model respectful behavior and establish respectful protocols.
- C. Establish interim milestones that work towards the final product.
- D. Design open ended projects with more than one solution.
- E. Frequently ask students to reflect on their progress.
- F. Ask students to track their goals and progress in journals.



F Match the collaborative norms from the poster to their corresponding definitions:



- _____ Allows time for thinking and enhances dialogue, discussion, and decision-making
- _____ Creates meaningful dialogue
- _____ Helps students seek first to understand
- _____ Increases clarity and precisions of a student's thinking
- _____ Helps students stay aware of how their words and actions affect the group
- _____ Allows students to hear and understand one another
- _____ Promotes productive dialogue and eliminates unintentional resentment

STEP 1 PRACTICE EXERCISES - SOLUTIONS



A Indicate if the following statements are true or false:

1. The current shift to learner-centered teaching environments means that the teacher is considered the 'expert.' T/F (Correct Answer: The current shift to learner-centered teaching environments means that the teacher is no longer the 'expert' but rather a supportive guide or facilitator for their students.)
2. Ultimately, the less power teachers share, the more dependent students become. T/F
3. In classrooms where teachers support autonomy, students improve their academic performance, are more creative and better adjusted, engage more in school, and feel less stress. T/F
4. Collaborative learning does not let students decide on how they structure their peer-interactions and learning; the teacher decides. T/F (Correct Answer: Collaborative learning lets students decide on how they structure the peer-interactions and learning.)
5. Problem-based learning is a type of inquiry-based learning which tends to be more long-term and interdisciplinary, often with no definitive answers at the end. T/F
6. Executive function processes such as verbal mediation, self-regulation, planning, judgment, and self-monitoring are all examples of metacognitive skills. T/F
7. The focus of problem-based learning is on developing and reinforcing one skill at a time. T/F (Correct Answer: Problem-based learning supports students in developing and reinforcing multiple skills simultaneously.)
8. Listening is an important skill in collaborative work. T/F



B Fill in the domain for each expected learning outcome according to UNESCO's framework for empowering students:

cognitive – socio-emotional – behavioral

cognitive Students acquire knowledge and understanding of local, national and global issues

behavioral Students develop the motivation and willingness to take necessary actions

cognitive Students develop critical thinking and analysis skills

socio-emotional Students experience a sense of belonging to a common humanity, sharing values and responsibilities based on human rights

cognitive Students acquire knowledge and understanding of the interconnectedness and interdependency of various countries and populations

socio-emotional Students develop attitudes of empathy, solidarity and respect for differences and diversity

behavioral Students act effectively and responsibly at local, national and global levels for a more sustainable and peaceful world



C Complete the chart by filling in the missing pieces:

Teacher Symbols¹ – “You must...” or “You need to...”² – Students are assessed with a number grade on every assignment³ – Organization⁴ – The students can choose their groups and the order of the tasks⁵ – “You could...” or “Maybe you try...”⁶ – Teacher Feedback⁷

BEHAVIOR	Autonomy Supportive	Controlling
7	“You wrote an engaging story with good structure.”	“You completed the exercise as you were told.”
Student Choice	5	The teacher chooses the groups and order of the tasks.
1	The teacher corrects an assignment with a green or blue pen.	The teacher corrects with a red pen.
Language	6	2
Grades	Students are assessed in various ways throughout the year.	3
4	Students can choose how much time they spend on certain tasks within a given amount of time.	Students have to finish the tasks when the teacher tells them to.



D Drag and drop the characteristics into the appropriate category in the chart below:

learn through real or simulated situations¹ – positive interdependence² – develop and improve communication, trust-building and leadership³ – teacher designs the learning structure⁴ – teachers are facilitators⁵ – there is no standard output⁶ – students work together in small groups on given tasks⁷ – the learning is more long-term and interdisciplinary⁸ – all group members are responsible for the success⁹ – the tasks are meaningful to the students themselves¹⁰ – the teacher takes control over the learning structure¹¹ – the whole team decides what is going good and where they have to change or improve something¹²

collaborative learning	problem-based learning	cooperative learning
2	1	4
3	6	7
5	8	11
9	10	12



E Match the skills (1-6) with the application of problem-based learning (A-F).

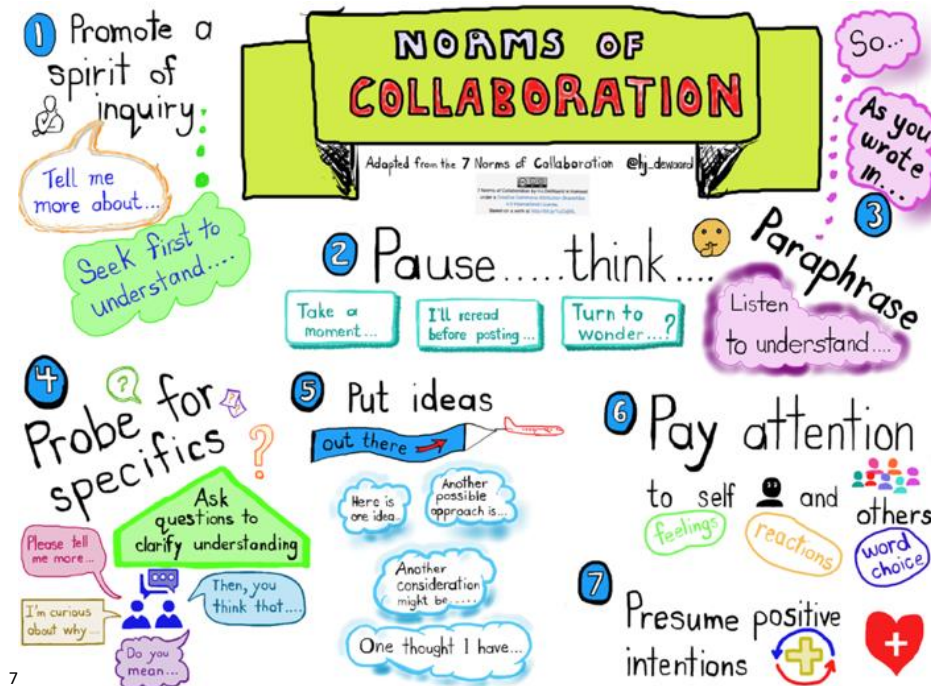
1. Flexibility
2. Organization
3. Self-control
4. Task Initiation
5. Time Management
6. Metacognition

- A. Provide students with tools to manage their project.
- B. Model respectful behavior and establish respectful protocols.
- C. Establish interim milestones that work towards the final product.
- D. Design open ended projects with more than one solution.
- E. Frequently ask students to reflect on their progress.
- F. Ask students to track their goals and progress in journals.

2A – 3B – 5C – 1D – 6E – 4F



F Match the collaborative norms from the poster to their corresponding definitions:



- 2** Allows time for thinking and enhances dialogue, discussion, and decision-making
- 5** Creates meaningful dialogue
- 1** Helps students seek first to understand
- 4** Increases clarity and precisions of a student's thinking
- 6** Helps students stay aware of how their words and actions affect the group
- 3** Allows students to hear and understand one another
- 7** Promotes productive dialogue and eliminates unintentional resentment

STEP 2 PRACTICE EXERCISES



A Read the following case studies. Decide which description represents problem-based learning, which one cooperative learning and which one collaborative learning:

Case Study 1

Mr. Nearyroth hands out a text on waste separation in his class and writes three questions on the board. The students should first read through the text themselves and write down key words. The students are supposed to work together in groups of three people to discuss the text and answer the questions. Mr. Nearyroth walks around the class and gives the teams help when they need it. All groups should then present their results and findings in front of the class. ____

Case Study 2

The 4th grade is currently learning the formulas for the area of squares and rectangles. Mrs. Munro brought the students various handcraft materials (e.g., glue, paper, string) and in groups of four, the students are asked to design a total of four models of squares and rectangles. The teacher then wants to continue working with these figures. _____

Case Study 3

The second-grade students are very excited when Ms. Vithanapathirana enters the class with posters and pens. Today she starts a new subject in biology class: health. She pushes the tables together and the children are supposed to work in groups of four to create a mind map on the subject of health. They should write down everything they can think of about the term health. Through the open task, the students should improve and develop social skills (e.g., communication) in addition to the content-related aspects. _____



B Below you will find a list of different statements of teacher autonomy supportive behavior and teacher controlling behavior. Drag and drop the examples into the appropriate category in the chart below:

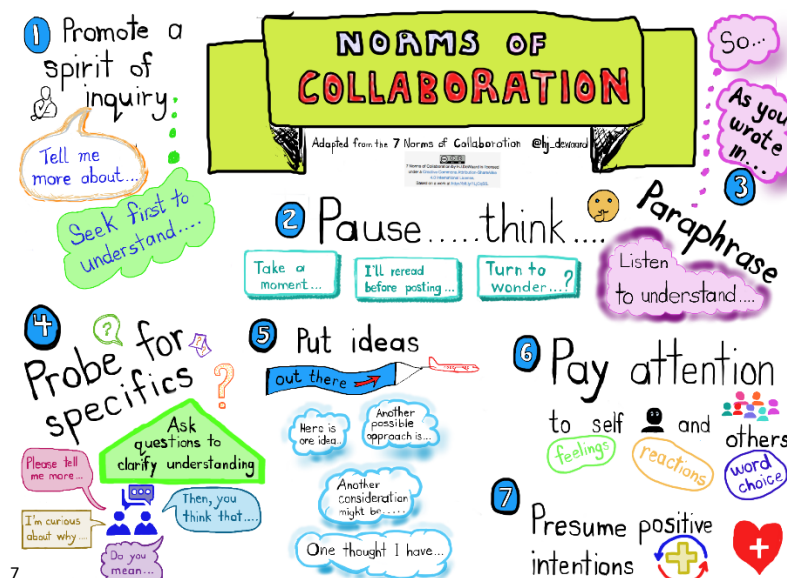
I always use a red pen to correct mistakes in texts or tests.¹ – I always tell my students that they can either work in groups or on their own.² – I have a working plan for each week. Students can choose when they want to work on which task. The only specification is that everything has to be done by Friday.³ – I always praise my students once they have solved all the math problems as they were told.⁴ – When it comes to group work, I let the students decide with whom they

want to work in a group.⁵ – I use all different colors for the correction and not just red.⁶ – When it comes to writing, I always tell my students exactly how much they have to write.⁷ – When it comes to pair work, my students always have to work together with the person sitting next to them.⁸ – I repeatedly remind my students that they will get a grade on their assignments.⁹ – I appreciate my students efforts and tell them when I think it's great that, for example, they underlined the solutions to the math problems with colored pens and a ruler.¹⁰ – If we have some minutes left in a lesson, my students can read a book of their choosing.¹¹

Autonomy Supportive Behavior	Controlling Behavior



C Adapt the definitions of the collaborative standards from the poster to the corresponding practical examples. To do this, connect the appropriate fields with each other:



- (1) Helps students seek first to understand:
 - (2) Allows time for thinking and enhances dialogue, discussion, and decision-making:
 - (3) Allows students to hear and understand one another:
 - (4) Increases clarity and precision of a student's thinking:
 - (5) Creates meaningful dialogue:
 - (6) Help students stay aware of how their words and actions affect the group:
 - (7) Promotes productive dialogue and eliminates unintentional resentment:
-
- (A) "So, you would say that the quality of sleep influences your performance in everyday life and also has an impact on your perception of stress? That's a good aspect."
 - (B) "I think Lisa wants to say that it doesn't depend on the kind of sport you do, but that you are active at all."
 - (C) "I would like to know more about how sleep can affect my health."
 - (D) "Do you agree if we also write sport on the board? How can exercise affect our health?"
 - (E) "To what extent do you think sleep affects the perception of stress?"
 - (F) "What do you think? I am waiting a minute to allow time to think first. Maybe you have some ideas."
 - (G) "I will write the words sleep and stress on our mind map."

STEP 2 PRACTICE EXERCISES - SOLUTIONS



A Read the following case studies. Decide which description represents problem-based learning, which one cooperative learning and which one collaborative learning:

Case Study 1

Mr. Nearyroth hands out a text on waste separation in his class and writes three questions on the board. The students should first read through the text themselves and write down key words. The students are supposed to work together in groups of three people to discuss the text and answer the questions. Mr. Nearyroth walks around the class and gives the teams help when they need it. All groups should then present their results and findings in front of the class.

Cooperative Learning

Case Study 2

The 4th grade is currently learning the formulas for the area of squares and rectangles. Mrs. Munro brought the students various handcraft materials (e.g., glue, paper, string) and in groups of four, the students are asked to design a total of four models of squares and rectangles. The teacher then wants to continue working with these figures. **Problem-Based Learning**

Case Study 3

The second-grade students are very excited when Ms. Vithanapathirana enters the class with posters and pens. Today she starts a new subject in biology class: health. She pushes the tables together and the children are supposed to work in groups of four to create a mind map on the subject of health. They should write down everything they can think of about the term health. Through the open task, the students should improve and develop social skills (e.g., communication) in addition to the content-related aspects. **Collaborative Learning**



B Below you will find a list of different statements of teacher autonomy supportive behavior and teacher controlling behavior. Drag and drop the examples into the appropriate category in the chart below:

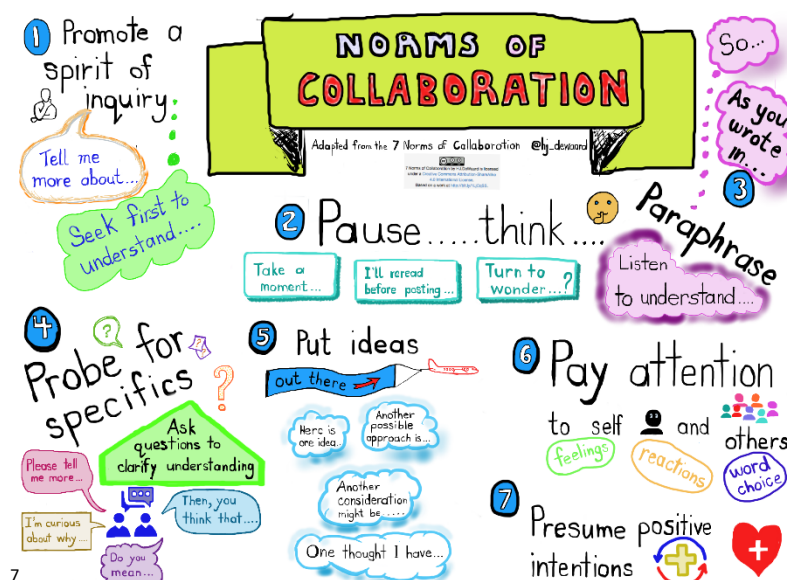
I always use a red pen to correct mistakes in texts or tests.¹ – I always tell my students that they can either work in groups or on their own.² – I have a working plan for each week. Students can choose when they want to work on which task. The only specification is that everything has to be done by Friday.³ – I always praise my students once they have solved all the math problems

as they were told.⁴ – When it comes to group work, I let the students decide with whom they want to work in a group.⁵ – I use all different colors for the correction and not just red.⁶ – When it comes to writing, I always tell my students exactly how much they have to write.⁷ – When it comes to pair work, my students always have to work together with the person sitting next to them.⁸ – I repeatedly remind my students that they will get a grade on their assignments.⁹ – I appreciate my students efforts and tell them when I think it's great that, for example, they underlined the solutions to the math problems with colored pens and a ruler.¹⁰ – If we have some minutes left in a lesson, my students can read a book of their choosing.¹¹

Autonomy Supportive Behavior	Controlling Behavior
2	1
3	4
5	7
6	8
10	9
11	



C Adapt the definitions of the collaborative standards from the poster to the corresponding practical examples. To do this, connect the appropriate fields with each other:



- (1) Helps students seek first to understand:
 - (2) Allows time for thinking and enhances dialogue, discussion, and decision-making:
 - (3) Allows students to hear and understand one another:
 - (4) Increases clarity and precision of a student's thinking:
 - (5) Creates meaningful dialogue:
 - (6) Help students stay aware of how their words and actions affect the group:
 - (7) Promotes productive dialogue and eliminates unintentional resentment:
-
- (A) "So, you would say that the quality of sleep influences your performance in everyday life and also has an impact on your perception of stress? That's a good aspect."
 - (B) "I think Lisa wants to say that it doesn't depend on the kind of sport you do, but that you are active at all."
 - (C) "I would like to know more about how sleep can affect my health."
 - (D) "Do you agree if we also write sport on the board? How can exercise affect our health?"
 - (E) "To what extent do you think sleep affects the perception of stress?"
 - (F) "What do you think? I am waiting a minute to allow time to think first. Maybe you have some ideas."
 - (G) "I will write the words sleep and stress on our mind map."

1C – 2F – 3A – 4E – 5G – 6D – 7B

STEP 3 PORTFOLIO TASK – SELF-REFLECTION QUESTIONS



Write an essay answer to the following self-reflection question. Your answer should be approximately 300-500 words long and answered in a coherent text with full sentences. THIS ESSAY ANSWER GOES INTO YOUR PERSONAL PORTFOLIO!

1. How can a teacher support students to experience self-empowerment within school life and/or classroom situations?

STEP 4 PORTFOLIO TASK – TEACHING PROJECT



Create your own personal teaching project. Develop an outline for either project-based learning or collaborative learning in your class and for your topic chosen in Module 1.1. This portfolio task should be approximately 800-1000 words long. THE TEACHING PROJECT GOES INTO YOUR PERSONAL PORTFOLIO!

Consider the following questions: Which aspects do you have to consider for this form of teaching, which methods could be useful, which organizational decisions do you have to take, how much time do you have at hand?

Successful educators understand how to put the learner into the focus of teaching and thus support the individual student on their path towards achievement. In this module, you will explore learner-centered education, and upon its completion, you will have a better understanding of how to incorporate the individual interests and needs of children into a cooperative learning environment. The focus will be on planning, conducting, reflecting, and evaluating lessons in a learner-centered way.



Enjoy!

